

EXHIBIT 8

PATENT ASSIGNMENT COVER SHEETElectronic Version v1.1
Stylesheet Version v1.2

EPAS ID: PAT2775969

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	SECURITY INTEREST
CONVEYING PARTY DATA	
Name	Execution Date
MALLINCKRODT INTERNATIONAL FINANCE S.A.	03/19/2014
MALLINCKRODT CB LLC	03/19/2014
MALLINCKRODT FINANCE GMBH	03/19/2014
MALLINCKRODT US HOLDINGS INC.	03/19/2014
MALLINCKRODT CARIBBEAN, INC.	03/19/2014
MALLINCKRODT US POOL LLC	03/19/2014
MALLINCKRODT INC.	03/19/2014
LUDLOW CORPORATION	03/19/2014
CNS THERAPEUTICS, INC.	03/19/2014
ENTERPRISES HOLDINGS, INC.	03/19/2014
MALLINCKRODT ENTERPRISES LLC	03/19/2014
MALLINCKRODT LLC	03/19/2014
LAFAYETTE PHARMACEUTICALS LLC	03/19/2014
LIEBEL-FLARSHEIM COMPANY LLC	03/19/2014
MALLINCKRODT BRAND PHARMACEUTICALS, INC	03/19/2014
MALLINCKRODT VETERINARY, INC.	03/19/2014
MALLINCKRODT US HOLDINGS LLC	03/19/2014
IMC EXPLORATION COMPANY	03/19/2014
MEH, INC	03/19/2014
MALLINCKRODT ENTERPRISES HOLDINGS, INC.	03/19/2014
RECEIVING PARTY DATA	
Name:	DEUTSCHE BANK AG NEW YORK BRANCH
Street Address:	60 WALL STREET
City:	NEW YORK
State/Country:	NEW YORK
Postal Code:	10006
PROPERTY NUMBERS Total: 419	
Property Type	Number
Patent Number:	5456670
Patent Number:	5519984
PATENT	

Property Type	Number
Application Number:	13215864
Application Number:	13233227
Application Number:	13241368
Application Number:	13260575
Application Number:	13260578
Application Number:	13263087
Application Number:	13272904
Application Number:	13294546
Application Number:	13303723
Application Number:	13319761
Application Number:	13319771
Application Number:	13353888
Application Number:	13353923
Application Number:	13369407
Application Number:	13383243
Application Number:	13465223
Application Number:	13473571
Application Number:	13473578
Application Number:	13473584
Application Number:	13473586
Application Number:	13491676
Application Number:	13520202
Application Number:	13549066
Application Number:	13563822
Application Number:	13599777
Application Number:	13599819
Application Number:	13626473
Application Number:	13646848
Application Number:	13657711
Application Number:	13664457
Application Number:	13670506
Application Number:	13676219
Application Number:	13689694
Application Number:	13697149
Application Number:	13705205
Application Number:	13722500
Application Number:	13742147
Application Number:	13742154
Application Number:	13749805

PATENT

REEL. 032480 FRAME. 0002

Property Type	Number
Application Number:	13762431
Application Number:	13772572
Application Number:	13787042
Application Number:	13794141
Application Number:	13800248
Application Number:	13802935
Application Number:	13808707
Application Number:	13808721
Application Number:	13814088
Application Number:	13855971
Application Number:	13865244
Application Number:	13865286
Application Number:	13869822
Application Number:	13876040
Application Number:	13878252
Application Number:	13890815
Application Number:	13925680
Application Number:	13939357
Application Number:	13978725
Application Number:	13988800
Application Number:	13995810
Application Number:	14003893
Application Number:	14010571
Application Number:	14019828
Application Number:	14045009
Application Number:	14092375
Application Number:	14092483
Application Number:	14092559
Application Number:	14109052
Application Number:	14115363
Application Number:	14131764
Application Number:	14131921
Application Number:	14132500
Application Number:	14149027
Application Number:	14149616
Application Number:	14173190
Application Number:	14232305
Application Number:	61529694
Application Number:	61771203

PATENT

REEL. 032480 FRAME. 0003

Property Type	Number
Application Number:	61779902
Application Number:	61780000
Application Number:	61780272
Application Number:	61791387
Application Number:	61792951
Application Number:	61794848
Application Number:	61798525
Application Number:	61799341
Application Number:	61840103
Application Number:	61858189
Application Number:	61871690
Application Number:	61871956
Application Number:	61878446
Application Number:	61878466
Application Number:	61878476
Application Number:	61882039
Application Number:	61886695
Application Number:	61898634
Application Number:	61901032
Application Number:	61905312
Application Number:	61926027
Application Number:	61926523
Application Number:	61928853
Application Number:	90009455
Application Number:	90009536
Application Number:	90007967
Application Number:	90009653

CORRESPONDENCE DATA

Fax Number: (650)213-8158

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via US Mail.

Phone: 6502130300

Email: iprecordations@whitecase.com

Correspondent Name: WHITE & CASE LLP / CHRISTINA ISHIHARA

Address Line 1: 3000 EL CAMINO REAL, BLDG 5, 9TH FLOOR

Address Line 4: PALO ALTO, CALIFORNIA 94306

ATTORNEY DOCKET NUMBER:	1111779-2453
NAME OF SUBMITTER:	CHRISTINA ISHIHARA
SIGNATURE:	/Christina Ishihara/

PATENT**REEL: 032480 FRAME: 0004**

DATE SIGNED:

03/19/2014

PAGE # 6

Total Attachments: 37

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PATENT**REEL: 032480 FRAME: 0005**

Property Type	Number
Patent Number:	5529787
Patent Number:	5619545
Patent Number:	5648536
Patent Number:	5655741
Patent Number:	5658261
Patent Number:	5662612
Patent Number:	5665074
Patent Number:	5681286
Patent Number:	5702725
Patent Number:	5743872
Patent Number:	5756745
Patent Number:	5804157
Patent Number:	5830431
Patent Number:	5855568
Patent Number:	5868710
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Patent Number:	5914131
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Patent Number:	6004292
Patent Number:	6102198
Patent Number:	6159183
Patent Number:	6196999
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Patent Number:	6254572
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Patent Number:	6343458
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Patent Number:	6368307
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Patent Number:	6569127
Patent Number:	6579985
Patent Number:	6596904
Patent Number:	6623455

PATENT

REEL. 032480 FRAME. 0006

Property Type	Number
Patent Number:	6635030
Patent Number:	6773686
Patent Number:	6780170
Patent Number:	6866837
Patent Number:	6929619
Patent Number:	6946060
Patent Number:	7041084
Patent Number:	7053242
Patent Number:	7087212
Patent Number:	7165672
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Patent Number:	7312368
Patent Number:	7321038
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Patent Number:	7343724
Patent Number:	7345188
Patent Number:	7374745
Patent Number:	7385068
Patent Number:	7399858
Patent Number:	7413123
Patent Number:	7452324
Patent Number:	7456306
Patent Number:	7456318
Patent Number:	7495098
Patent Number:	7495246
Patent Number:	7498434
Patent Number:	7507221
Patent Number:	7511060
Patent Number:	7512434
Patent Number:	7588189
Patent Number:	7589061
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Patent Number:	7622586
Patent Number:	7632246
Patent Number:	7671204
Patent Number:	7682601

PATENT

REEL. 032480 FRAME. 0007

Property Type	Number
Patent Number:	7691880
Patent Number:	7692013
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Patent Number:	7698180
Patent Number:	7713514
Patent Number:	7714063
Patent Number:	7725168
Patent Number:	7727196
Patent Number:	7728145
Patent Number:	7750187
Patent Number:	7753835
Patent Number:	7771389
Patent Number:	7772565
Patent Number:	7772848
Patent Number:	7794429
Patent Number:	7812322
Patent Number:	7824374
Patent Number:	7834184
Patent Number:	7838677
Patent Number:	7838844
Patent Number:	7854726
Patent Number:	7859473
Patent Number:	7898416
Patent Number:	7901667
Patent Number:	7918009
Patent Number:	7918010
Patent Number:	7935821
Patent Number:	7963936
Patent Number:	7975922
Patent Number:	7985858
Patent Number:	7988677
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Patent Number:	7998133
Patent Number:	7999105
Patent Number:	8003967
Patent Number:	8012124
Patent Number:	8012125
Patent Number:	8017777
Patent Number:	8022181

PATENT

REEL. 032480 FRAME. 0006

Property Type	Number
Patent Number:	8035517
Patent Number:	8038182
Patent Number:	8067596
Patent Number:	8067597
Patent Number:	8080661
Patent Number:	8101757
Patent Number:	8115002
Patent Number:	8118780
Patent Number:	8119103
Patent Number:	8133198
Patent Number:	8141417
Patent Number:	8141598
Patent Number:	8148528
Patent Number:	8163912
Patent Number:	8168790
Patent Number:	8170172
Patent Number:	8180434
Patent Number:	8182788
Patent Number:	8193347
Patent Number:	8217175
Patent Number:	8227483
Patent Number:	8227608
Patent Number:	8227611
Patent Number:	8232396
Patent Number:	8232397
Patent Number:	8232398
Patent Number:	8232400
Patent Number:	8242277
Patent Number:	8246930
Patent Number:	8251071
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Patent Number:	8252928
Patent Number:	8257683
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Patent Number:	8269006
Patent Number:	8269201
Patent Number:	8273887
Patent Number:	8273888
Patent Number:	8277416

PATENT

REEL. 032480 FRAME. 0009

Property Type	Number
Patent Number:	8282595
Patent Number:	8283472
Patent Number:	8288744
Patent Number:	8293906
Patent Number:	8293907
Patent Number:	8303932
Patent Number:	8303933
Patent Number:	8308689
Patent Number:	8308698
Patent Number:	8309727
Patent Number:	8314237
Patent Number:	8317099
Patent Number:	8318113
Patent Number:	8342331
Patent Number:	8343101
Patent Number:	8343102
Patent Number:	8348896
Patent Number:	8353879
Patent Number:	8362452
Patent Number:	8366670
Patent Number:	8366671
Patent Number:	8367827
Patent Number:	8372379
Patent Number:	8377003
Patent Number:	8383649
Patent Number:	8383815
Patent Number:	8394814
Patent Number:	8399475
Patent Number:	8399671
Patent Number:	8409134
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Patent Number:	8417320
Patent Number:	8420857
Patent Number:	8421044
Patent Number:	8431074
Patent Number:	8431701
Patent Number:	8431705
Patent Number:	8431909
Patent Number:	8436174

PATENT

REEL. 032480 FRAME. 0010

Property Type	Number
Patent Number:	8439863
Patent Number:	8445682
Patent Number:	8445725
Patent Number:	8446280
Patent Number:	8454560
Patent Number:	8461337
Patent Number:	8461384
Patent Number:	8471023
Patent Number:	8486008
Patent Number:	8490795
Patent Number:	8492547
Patent Number:	8500677
Patent Number:	8513632
Patent Number:	8519133
Patent Number:	8523813
Patent Number:	8524006
Patent Number:	8524904
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Patent Number:	8563727
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Patent Number:	8597681
Patent Number:	8614224
Patent Number:	8623888
Patent Number:	8624030
Patent Number:	8624031
Patent Number:	8627957
Patent Number:	8628514
Patent Number:	8629301
Patent Number:	8630694
Patent Number:	8633461
Patent Number:	8657787
Patent Number:	8658433
Patent Number:	8658631
Patent Number:	8663164

PATENT

REEL. 032480 FRAME. 0011

Property Type	Number
Patent Number:	8663166
Patent Number:	6344178
Patent Number:	D488864
Patent Number:	D547447
Patent Number:	D550838
Patent Number:	D572818
Patent Number:	D589157
Patent Number:	D602164
Patent Number:	D607117
Patent Number:	D617910
Patent Number:	D657886
Patent Number:	D683466
Patent Number:	6648860
Patent Number:	7491191
Application Number:	10588674
Application Number:	10780269
Application Number:	10811258
Application Number:	11073910
Application Number:	11073915
Application Number:	11458463
Application Number:	11551804
Application Number:	11618023
Application Number:	11618180
Application Number:	11677926
Application Number:	11677946
Application Number:	11877564
Application Number:	11909270
Application Number:	11915606
Application Number:	12097553
Application Number:	12159025
Application Number:	12179129
Application Number:	12247601
Application Number:	12282420
Application Number:	12296142
Application Number:	12299944
Application Number:	12374051
Application Number:	12403190
Application Number:	12529723
Application Number:	12546898

PATENT

REEL. 032480 FRAME. 0012

Property Type	Number
Application Number:	12552457
Application Number:	12553144
Application Number:	12560614
Application Number:	12615534
Application Number:	12668900
Application Number:	12676968
Application Number:	12679362
Application Number:	12681125
Application Number:	12701342
Application Number:	12738846
Application Number:	12742928
Application Number:	12742930
Application Number:	12746192
Application Number:	12757098
Application Number:	12773324
Application Number:	12810149
Application Number:	12811104
Application Number:	12921785
Application Number:	12921787
Application Number:	12921839
Application Number:	12973962
Application Number:	12975407
Application Number:	12996989
Application Number:	13014876
Application Number:	13014896
Application Number:	13015223
Application Number:	13015480
Application Number:	13015498
Application Number:	13063810
Application Number:	13080499
Application Number:	13102028
Application Number:	13103203
Application Number:	13103234
Application Number:	13103266
Application Number:	13120537
Application Number:	13139544
Application Number:	13146299
Application Number:	13196921
Application Number:	13201632

PATENT

REEL. 032480 FRAME. 0013

Notice of Grant of Security Interest in Patents

NOTICE OF GRANT OF SECURITY INTEREST IN PATENTS, dated as of March 19, 2014 (this "Agreement"), made by **MALLINCKRODT INTERNATIONAL FINANCE S.A.**, a public limited liability company (*société anonyme*) incorporated under the laws of the Grand Duchy of Luxembourg, having its registered office at 42-44, Avenue de la Gare, L-1610 Luxembourg, and registered with the Luxembourg Trade and Companies Register (*R.C.S. Luxembourg*) under number B 172.865 (the "**Lux Borrower**"), MALLINCKRODT CB LLC, a Delaware limited liability company (the "**Co-Borrower**"), and together with the Lux Borrower, the "**Borrowers**"), MALLINCKRODT FINANCE GMBH, a limited liability company (*Gesellschaft mit beschränkter Haftung*), with registered seat in Neuhausen am Rheinfall, organized under the laws of Switzerland, under the company number CHE-113.353.767 (the "**Swiss Finco**"), and each other Pledgor listed on the signature pages hereof (together with the Lux Borrower, the Co-Borrower and the Swiss Finco, collectively, the "**Pledgors**"), in favor of **DEUTSCHE BANK AG NEW YORK BRANCH**, as collateral agent (the "**Collateral Agent**").

Reference is made to the U.S. Collateral Agreement dated as of March 19, 2014 (as amended, restated, supplemented or otherwise modified from time to time, the "**U.S. Collateral Agreement**"), among the Borrowers, Swiss Finco, the other pledgors from time to time party thereto (including the Pledgors) and the Collateral Agent. The parties hereto agree as follows:

SECTION 1. Terms. Capitalized terms used in this Agreement and not otherwise defined herein have the meanings specified in the U.S. Collateral Agreement. The rules of construction specified in Section 1.01(b) of the U.S. Collateral Agreement also apply to this Agreement.

SECTION 2. Grant of Security Interest. As security for the payment and performance, as applicable, in full of the Secured Obligations, each Pledgor pursuant to the U.S. Collateral Agreement did, and hereby does, assign and pledge to the Collateral Agent, its successors and permitted assigns, for the benefit of the Secured Parties, a continuing security interest in all of such Pledgor's right, title and interest in, to and under any and all of the following assets now owned or at any time hereafter acquired by such Pledgor or in which such Pledgor now has or at any time in the future may acquire any right, title or interest (collectively, but excluding any Excluded Property, the "**IP Collateral**"):

all Patents of the United States of America, including those listed on Schedule I;

provided, however, that the foregoing pledge, assignment and grant of security interest will not cover any Excluded Property.

SECTION 3. U.S. Collateral Agreement. The security interests granted to the Collateral Agent herein are granted in furtherance, and not in limitation of, the security interests granted to the Collateral Agent pursuant to the U.S. Collateral Agreement. Each Pledgor hereby acknowledges and affirms that the rights and remedies of the Collateral Agent with respect to the IP Collateral are more fully set forth in the U.S. Collateral Agreement, the terms and provisions of which are hereby incorporated herein by reference as if fully

set forth herein. In the event of any conflict between the terms of this Agreement and the U.S. Collateral Agreement, the terms of the U.S. Collateral Agreement shall govern.

SECTION 4. *Counterparts*. This Agreement may be executed in two or more counterparts, each of which shall constitute an original but all of which when taken together shall constitute but one contract. Delivery of an executed counterpart to this Agreement by facsimile or other electronic transmission shall be as effective as delivery of a manually signed original.

SECTION 5. *Governing Law*. **THIS AGREEMENT AND ANY CLAIMS, CONTROVERSY, DISPUTE OR CAUSES OF ACTION (WHETHER IN CONTRACT OR TORT OR OTHERWISE) BASED UPON, ARISING OUT OF OR RELATING TO THIS AGREEMENT SHALL BE CONSTRUED IN ACCORDANCE WITH AND GOVERNED BY THE LAWS OF THE STATE OF NEW YORK.**

[Signature Pages Follow]

IN WITNESS WHEREOF, the parties hereto have duly executed this Agreement as of the day and year first above written.

MALLINCKRODT INTERNATIONAL
FINANCE S.A.

By: 

Name: John Einwalter

Title: Director

IN WITNESS WHEREOF, the parties hereto have duly executed this Agreement as of the day and year first above written.

MALLINCKRODT FINANCE GMBH

By: 

Name: Alan Catterson

Title: Managing Director

[Signature Page to Mallinckrodt Notice of Grant of Security Interest in Patents]

IN WITNESS WHEREOF, the parties hereto have duly executed this Agreement
as of the day and year first above written.

MALLINCKRODT CB LLC
MALLINCKRODT US HOLDINGS INC.
MALLINCKRODT CARIBBEAN, INC.
MALLINCKRODT US POOL LLC
MALLINCKRODT INC.
LUDLOW CORPORATION
CNS THERAPEUTICS, INC.
ENTERPRISES HOLDINGS, INC.
MALLINCKRODT ENTERPRISES LLC
MALLINCKRODT LLC
LAFAYETTE PHARMACEUTICALS LLC
LIEBEL-FLARSHEIM COMPANY LLC
MALLINCKRODT BRAND
PHARMACEUTICALS, INC.
MALLINCKRODT VETERINARY, INC.
MALLINCKRODT US HOLDINGS LLC
IMC EXPLORATION COMPANY
MEH, INC.
MALLINCKRODT ENTERPRISES HOLDINGS,
INC.,
each as a Pledgor

By: 

Name: John Einwalter

Title: Vice President & Treasurer

DEUTSCHE BANK AG NEW YORK BRANCH,
as Pledgee

By: 

Name: **Michael Shannon**
Title: **Vice President**

By: 

Name: **Michael Getz**
Title: **Vice President**

[Signature Page to Mallinckrodt Notice of Grant of Security Interest in Patents]

Schedule I
to Notice of Grant of Security Interest in Patents

Patents

[Attached]

Mallinckrodt Patents

CaseNumber	SubCase	Country	Owner Name	Application Status	AppNumber	Filing Date	Patent Number	Issue Date	Title
H-MI-00241		US	MALLINCKRODT LLC	Granted	12/738845	4/20/2010	8539644	9/24/2013	LOCKING HINGES (INFLATOR GEAR)
H-MI-00241	D1	US	MALLINCKRODT LLC	Published	14/010571	8/27/2013			LOCKING HINGES (INFLATOR GEAR)
H-MI-00242		US	MALLINCKRODT LLC	Published	11/877564	10/23/2007			SLIP RING
H-MI-00242	T1	US	MALLINCKRODT LLC	Published	12/738846	4/20/2010			SLIP RING
H-MI-00248		US	MALLINCKRODT LLC	Granted	09/864967	5/24/2001	7041084	5/9/2006	HAND-HELD, HAND OPERATED POWER SYRINGE AND METHODS
H-MI-00248	C1	US	MALLINCKRODT LLC	Published	13/102028	5/5/2011			HAND-HELD, HAND-OPERATED POWER SYRINGE AND METHODS
H-MI-00248	T1	US	MALLINCKRODT LLC	Granted	11/431377	5/9/2005	7988677	8/2/2011	HAND-HELD, HAND-OPERATED POWER SYRINGE AND METHODS
H-MI-00249		US	MALLINCKRODT LLC	Published	12/681125	4/1/2010			METHODS FOR MANUALLY INJECTING/ASPIRATING FLUIDS THROUGH SMALL DIAMETER CATHETERS AND NEEDLES AND MANUAL INJECTION/ASPIRATION SYSTEMS INCLUDING SMALL DIAMETER CATHETERS AND NEEDLES
1498:H	3	US	MALLINCKRODT LLC	Granted	11/931683	10/31/2007	8658433	2/25/2014	DYE-AZIDE COMPOSITIONS FOR DUAL PHOTOTHERAPY
H-MI-00197		US	MALLINCKRODT LLC	Published	13/319761	11/10/2011			COMPOUNDS CONTAINING ACYCLIC N-N BONDS FOR PHOTOTHERAPY
H-MI-00232		US	MALLINCKRODT LLC	Published	13/319771	11/10/2011			DIAZA HETEROCYCLIC COMPOUNDS FOR PHOTOTHERAPY
H-MI-00265		US	MALLINCKRODT LLC	Published	13/383243	1/10/2012			COMPOUNDS AND COMPOSITIONS FOR USE IN PHOTOTHERAPY AND IN TREATMENT OF OCULAR NEOVASCULAR DISEASE AND CANCERS
H-MI-00320		US	MALL LLC/WASH UNIV/TEXAS A&M (JOINTLY OWNED)	Published	13/697149	11/9/2012			FUNCTIONALIZED, CROSS-LINKED NANOSTRUCTURES FOR TANDEM OPTICAL IMAGING AND THERAPY
1092:H		US	LIEBEL-FLARSHEIM COMPANY LLC	Granted	08/536272	9/29/1995	5883615	3/16/1999	Foot-Operated Control System for a Multi-Function

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CaseNumber	SubCase	Country	Owner Name	Application Status	AppNumber	Filing Date	Patent Number	Issue Date	Title
1093:H		US	LIEBEL-FLARSHEIM COMPANY LLC	Granted	08/405818	3/16/1995	5655741	8/12/1997	Pivotal Instrument Support Apparatus
1094:H		US	LIEBEL-FLARSHEIM COMPANY LLC	Granted	08/535771	9/28/1995	5665074	9/9/1997	Limited Backflow Reflux Valve And Method
1094:H	B	US	LIEBEL-FLARSHEIM COMPANY LLC	Granted	08/841287	4/29/1997	5743872	4/28/1998	Limited Backflow Reflux Valve And Method
1172:H		US	LIEBEL-FLARSHEIM COMPANY LLC	Granted	08/756803	11/26/1996	5902276	5/11/1999	Two-Shot Molded Plunger
1173:H		US	LIEBEL-FLARSHEIM COMPANY LLC	Granted	08/753283	11/22/1996	5855568	1/5/1999	Angiographic Syringe and Luer Connector
1174:H		US	LIEBEL-FLARSHEIM COMPANY LLC	Granted	08/753288	11/22/1996	5868710	2/9/1999	Medical Fluid Injector
1174:H	1	US	LIEBEL-FLARSHEIM COMPANY LLC	Granted	09/189337	11/10/1998	5925022	7/20/1999	Medical Fluid Injector
1174:H	2	US	LIEBEL-FLARSHEIM COMPANY LLC	Granted	09/189470	11/10/1998	6004292	12/21/1999	Medical Fluid Injector
1174:H	3	US	LIEBEL-FLARSHEIM COMPANY LLC	Granted	09/437410	11/10/1999	6159183	12/12/2000	Medical Fluid Injector
1174:H	4	US	LIEBEL-FLARSHEIM COMPANY LLC	Granted	09/447101	11/22/1999	6254572	7/3/2001	Medical Fluid Injector
1174:H	X0	US	LIEBEL-FLARSHEIM COMPANY LLC	Granted	90/009455	7/22/2009	5868710	3/22/2011	Medical Fluid Injector
1174:H	X3	US	LIEBEL-FLARSHEIM COMPANY LLC	Granted	90/009536	8/28/2009	6159183	3/16/2010	Medical Fluid Injector
1182:H	1	US	LIEBEL-FLARSHEIM COMPANY LLC	Granted	09/665374	9/20/2000	6569127	5/27/2003	Adapter and Syringe for Front Loading Medical Fluid Injector
1182:H	4	US	LIEBEL-FLARSHEIM COMPANY LLC	Pending	11/458463	7/19/2006			Adapter and Syringe for Front Loading Medical Fluid Injector
1182:H	5	US	LIEBEL-FLARSHEIM COMPANY LLC	Pending	11/677946	2/22/2007			METHODS FOR USING FRONT-LOADING MEDICAL FLUID INJECTOR
1182:H	6	US	LIEBEL-FLARSHEIM COMPANY LLC	Pending	11/677926	2/22/2007			SPRING LOADED MEDICAL FLUID INJECTOR ASSEMBLY
1182:H	7	US	LIEBEL-FLARSHEIM COMPANY LLC	Granted	12/035293	2/21/2008	8012124	9/6/2011	SPRING LOADED MEDICAL FLUID INJECTOR ASSEMBLY
1182:H	8	US	LIEBEL-FLARSHEIM COMPANY LLC	Granted	11/738925	4/23/2007	8597246	12/3/2013	SPRING LOADED MEDICAL FLUID INJECTOR ASSEMBLY

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CaseNumber	SubCase	Country	Owner Name	Application Status	AppNumber	Filing Date	Patent Number	Issue Date	Title
1182:H	9	US	LIEBEL-FLARSHEIM COMPANY LLC	Granted	12/035304	2/21/2008	8012125	9/6/2011	FRONT LOADED MEDICAL FLUID SYRINGE MOUNTING
1254:H		US	LIEBEL-FLARSHEIM COMPANY LLC	Granted	08/877083	6/17/1997	5913844	6/22/1999	Power Injector and Method Providing Removal of Used Disposable Syringe
1342:H		US	LIEBEL-FLARSHEIM COMPANY LLC	Granted	10/211726	8/2/2002	6929619	8/16/2005	ELPH Injector
1342:H	3	US	LIEBEL-FLARSHEIM COMPANY LLC	Granted	10/949137	9/24/2004	7632246	12/15/2009	ELPH Injector
1342:H	4	US	LIEBEL-FLARSHEIM COMPANY LLC	Granted	11/738885	4/23/2007	7854726	12/21/2010	Injector
1342:H	5	US	LIEBEL-FLARSHEIM COMPANY LLC	Published	12/247601	10/8/2008			INJECTOR
1342:H	6	US	LIEBEL-FLARSHEIM COMPANY LLC	Published	13/080499	4/5/2011			INJECTOR
1384:H		US	LIEBEL-FLARSHEIM COMPANY LLC	Granted	09/245229	2/5/1999	6196999	3/6/2001	IMPROVED SYRINGE/PLUNGER COUPLING
1384:H	1	US	LIEBEL-FLARSHEIM COMPANY LLC	Granted	09/764630	1/18/2001	7300417	11/27/2007	IMPROVED SYRINGE/PLUNGER COUPLING
1384:H	D2	US	LIEBEL-FLARSHEIM COMPANY LLC	Granted	11/872484	10/15/2007	8353879	1/15/2013	IMPROVED SYRINGE/PLUNGER COUPLING
1390:H	DV	US	LIEBEL-FLARSHEIM COMPANY LLC	Granted	08/417823	4/6/1995	5658261	8/19/1997	DISPOSABLE FRONT LOADABLE SYRINGE FOR POWER INJECTOR FOR INJECTING FLUID INTO ANIMALS
1395:H		US	LIEBEL-FLARSHEIM COMPANY LLC	Granted	08/205710	3/3/1994	5456670	10/10/1995	POWER INJECTOR FOR INJECTING FLUID INTO ANIMALS
1396:H		US	LIEBEL-FLARSHEIM COMPANY LLC	Granted	08/467696	6/6/1995	5681286	10/28/1997	CONTROLLING PLUNGER DRIVES FOR FLUID INJECTIONS IN ANIMALS
1396:H	A	US	LIEBEL-FLARSHEIM COMPANY LLC	Granted	08/494795	6/26/1995	5662612	9/2/1997	CONTROLLING PLUNGER DRIVES FOR FLUID INJECTIONS IN ANIMALS
1396:H	B	US	LIEBEL-FLARSHEIM COMPANY LLC	Granted	08/919610	8/28/1997	5928197	7/27/1999	CONTROLLING PLUNGER DRIVES FOR FLUID INJECTIONS IN ANIMALS
1396:H	D	US	LIEBEL-FLARSHEIM COMPANY LLC	Granted	12/020521	1/26/2008	7824374	11/2/2010	CONTROLLING PLUNGER DRIVES FOR FLUID INJECTIONS IN ANIMALS
1396:H	E	US	LIEBEL-FLARSHEIM COMPANY LLC	Granted	12/052494	3/20/2008	7794429	9/14/2010	CONTROLLING PLUNGER DRIVES FOR FLUID INJECTIONS IN ANIMALS

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1402:H	2	US	LIEBEL-FLARSHEIM COMPANY LLC	Granted	09/697204	10/26/2000	6368307	4/9/2002	FRONT LOADING POWER INJECTOR AND METHOD OF LOADING FLANGED SYRINGE THEREIN
1419:H		US	MALLINCKRODT LLC	Granted	09/353521	7/14/1999	6355024	3/12/2002	MEDICAL FLUID DELIVERY SYSTEM
1420:H		US	MALLINCKRODT LLC	Granted	09/353217	7/14/1999	6468261	10/22/2002	MEDICAL FLUID DELIVERY SYSTEM
1421:H	1	US	MALLINCKRODT LLC	Granted	09/788791	2/20/2001	6623455	9/23/2003	MEDICAL FLUID DELIVERY SYSTEM
1438:H		US	MALLINCKRODT LLC	Granted	09/676143	9/29/2000	6511459	1/28/2003	SYRINGE PLUNGER HAVING AN IMPROVED SEALING ABILITY
1450:H		US	B.H.B., LC/LIEBEL FLARSHEIM LLC (JOINTLY OWNED)	Granted NR	09/289289	4/9/1999	6635030	10/21/2003	CONTRAST INJECTOR FOR INJECTING A CONTRAST MEDIUM TO GENERATE PROLONGED UNIFORM VASCULAR ENHANCEMENT
1453:H		US	MALLINCKRODT LLC	Granted	12/665741	12/21/2009	8630694	1/14/2014	FLUID DRIVEN MEDICAL INJECTORS
1453:H	C1	US	MALLINCKRODT LLC	Pending	13/722500	12/20/2012			FLUID DRIVEN MEDICAL INJECTORS
1453:H	D1	US	MALLINCKRODT LLC	Granted	12/830542	7/6/2010	8343101	1/1/2013	FLUID DRIVEN MEDICAL INJECTORS
1453:H	D2	US	MALLINCKRODT LLC	Granted	12/830546	7/6/2010	8343102	1/1/2013	FLUID DRIVEN MEDICAL INJECTORS
1453:H	D3	US	MALLINCKRODT LLC	Granted	12/830559	7/6/2010	8308698	11/13/2012	FLUID DRIVEN MEDICAL INJECTORS
1562:H		US	LIEBEL-FLARSHEIM COMPANY LLC	Granted	09/851462	5/8/2001	7512434	3/31/2009	REMOTELY POWERED MR INJECTOR
1562:H	C1	US	LIEBEL-FLARSHEIM COMPANY LLC	Granted	11/938553	11/12/2007	7991451	8/2/2011	METHOD OF OPERATION FOR A MAGNETIC RESONANCE IMAGING SUITE
1562:H	C2	US	LIEBEL-FLARSHEIM COMPANY LLC	Granted	12/255282	10/21/2008	7772848	8/10/2010	METHOD OF OPERATION FOR A MAGNETIC RESONANCE IMAGING SUITE
1562:H	X0	US	LIEBEL-FLARSHEIM COMPANY LLC	Granted	90/009653	5/8/2001	7512434	9/14/2010	REMOTELY POWERED MR INJECTOR
1598:H		US	MALLINCKRODT LLC	Published	10/811258	3/26/2004			CALIBRATED PUSHROD FOR INJECTION VOLUME CONTROL IN PREFILLED SYRINGES
1617:H		US	MALLINCKRODT LLC	Granted	10/750427	12/31/2003	7621892	11/24/2009	CONTRAST CONTAINER HOLDER AND METHOD TO FILL SYRINGES
1617:H	D1	US	MALLINCKRODT LLC	Granted	12/617558	12/31/2003	8141598	3/27/2012	CONTRAST CONTAINER HOLDER AND METHOD TO FILL SYRINGES

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1620:H		US	LIEBEL-FLARSHEIM COMPANY LLC	Granted	10/146696	5/15/2002	6780170	8/24/2004	HYDRAULIC REMOTE FOR A MEDICAL FLUID INJECTOR
1620:H	DV1	US	LIEBEL-FLARSHEIM COMPANY LLC	Granted	10/924302	8/23/2004	8118780	2/21/2012	HYDRAULIC REMOTE FOR A MEDICAL FLUID INJECTOR
1620:H	DV2	US	LIEBEL-FLARSHEIM COMPANY LLC	Published	13/369407	2/9/2012			HYDRAULIC REMOTE FOR A MEDICAL FLUID INJECTOR
1624:H		US	MALLINCKRODT LLC	Granted	11/571464	9/11/2007	8035517	10/11/2011	SYSTEMS AND METHODS FOR MANAGING INFORMATION RELATING TO MEDICAL FLUIDS AND CONTAINERS THEREFOR
1624:H	D10	US	MALLINCKRODT LLC	Granted	11/618032	12/29/2006	7413123	8/19/2008	SYSTEMS AND METHODS FOR MANAGING INFORMATION RELATING TO MEDICAL FLUIDS AND CONTAINERS THEREFOR
1624:H	D11	US	MALLINCKRODT LLC	Granted	11/618065	12/29/2006	7698180	4/13/2010	SYSTEMS AND METHODS FOR MANAGING INFORMATION RELATING TO MEDICAL FLUIDS AND CONTAINERS THEREFOR
1624:H	D14	US	MALLINCKRODT LLC	Granted	12/049482	3/17/2008	7963936	6/21/2011	SYSTEMS AND METHODS FOR MANAGING INFORMATION RELATING TO MEDICAL FLUIDS AND CONTAINERS THEREFOR
1624:H	D3	US	MALLINCKRODT LLC	Granted	11/617987	12/29/2006	7859473	12/28/2010	SYSTEMS AND METHODS FOR MANAGING INFORMATION RELATING TO MEDICAL FLUIDS AND CONTAINERS THEREFOR
1624:H	D4	US	MALLINCKRODT LLC	Published	11/618023	12/29/2006			SYSTEMS AND METHODS FOR MANAGING INFORMATION RELATING TO MEDICAL FLUIDS AND CONTAINERS THEREFOR
1624:H	D6	US	MALLINCKRODT LLC	Granted	11/618145	12/29/2006	7588189	9/15/2009	SYSTEMS AND METHODS FOR MANAGING INFORMATION RELATING TO MEDICAL FLUIDS AND CONTAINERS THEREFOR

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1624:H	D7	US	MALLINCKRODT LLC	Published	11/618180	12/29/2006			SYSTEMS AND METHODS FOR MANAGING INFORMATION RELATING TO MEDICAL FLUIDS AND CONTAINERS THEREFOR
1624:H	D8	US	MALLINCKRODT LLC	Granted	11/617920	12/29/2006	7898416	3/1/2011	SYSTEMS AND METHODS FOR MANAGING INFORMATION RELATING TO MEDICAL FLUIDS AND CONTAINERS THEREFOR
1624:H	D9	US	MALLINCKRODT LLC	Granted	11/618006	12/29/2006	7975922	7/12/2011	SYSTEMS AND METHODS FOR MANAGING INFORMATION RELATING TO MEDICAL FLUIDS AND CONTAINERS THEREFOR
1624:H	T1	US	MALLINCKRODT LLC	Granted	11/618298	12/29/2006	8317099	11/27/2012	SYSTEMS AND METHODS FOR MANAGING INFORMATION RELATING TO MEDICAL FLUIDS AND CONTAINERS THEREFOR
1624:H	T2	US	MALLINCKRODT LLC	Granted	12/016583	1/18/2008	8446280	5/21/2013	SYSTEMS AND METHODS FOR MANAGING INFORMATION RELATING TO MEDICAL FLUIDS AND CONTAINERS THEREFOR
1634:H	D1	US	MALLINCKRODT LLC	Granted	12/108007	4/23/2008	8262644	9/11/2012	DISPOSABLE FRONT LOADABLE SYRINGE AND INJECTOR
1634:H	T1	US	MALLINCKRODT LLC	Granted	12/107988	4/23/2008	7998133	8/16/2011	DISPOSABLE FRONT LOADABLE SYRINGE AND INJECTOR
1672:H		US	MALLINCKRODT LLC	Published	10/780269	2/17/2004			INJECTOR AUTO PURGE
1672:H	C1	US	MALLINCKRODT LLC	Pending	14/149616	1/7/2014			INJECTOR AUTO PURGE
1672:H	CP	US	MALLINCKRODT LLC	Granted	11/073892	3/7/2005	7771389	8/10/2010	INJECTOR AUTO PURGE
1672:H	T2	US	MALLINCKRODT LLC	Granted	12/762588	4/19/2010	8523813	9/3/2013	INJECTOR AUTO PURGE
1707:H		US	MALLINCKRODT LLC	Granted	10/964003	10/13/2004	7507221	3/24/2009	IMPROVEMENTS TO POWERHEAD OF A POWER INJECTION SYSTEM
1707:H	C1	US	MALLINCKRODT LLC	Granted	12/396596	3/3/2009	8366671	2/5/2013	POWERHEAD OF A POWER INJECTION SYSTEM
1707:H	D5	US	MALLINCKRODT LLC	Granted	12/013656	1/14/2008	8366670	2/5/2013	POWERHEAD OF A POWER INJECTION SYSTEM
1707:H	D6	US	MALLINCKRODT LLC	Granted	12/013628	1/14/2008	7727196	6/1/2010	POWERHEAD OF A POWER INJECTION SYSTEM

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1707:H	DN1	US	LIEBEL-FLARSHEIM COMPANY LLC	Granted	29/227140	4/7/2005	D547447	7/24/2007	POWER INJECTION SYSTEM FACE PLATE
1707:H	DN2	US	LIEBEL-FLARSHEIM COMPANY LLC	Granted	29/227127	4/7/2005	D550838	9/11/2007	IMPROVEMENTS TO POWERHEAD OF A POWER INJECTION SYSTEM
1707:H	DN3	US	LIEBEL-FLARSHEIM COMPANY LLC	Granted	29/227139	4/7/2005	D572818	7/8/2008	POWER INJECTION SYSTEM FACE PLATE
1707:H	DV1	US	MALLINCKRODT LLC	Granted	11/073883	3/7/2005	8663164	3/4/2014	POWERHEAD OF A POWER INJECTION SYSTEM
1707:H	DV2	US	MALLINCKRODT LLC	Granted	11/073902	3/7/2005	8277416	10/2/2012	POWERHEAD OF A POWER INJECTION SYSTEM
1707:H	DV3	US	MALLINCKRODT LLC	Granted	12/013647	1/14/2008	8180434	5/15/2012	POWERHEAD OF A POWER INJECTION SYSTEM
1707:H	DV4	US	MALLINCKRODT LLC	Granted	12/013644	1/14/2008	8282595	10/9/2012	POWERHEAD OF A POWER INJECTION SYSTEM
1707:H	DV5	US	MALLINCKRODT LLC	Published	13/549066	7/13/2012			POWERHEAD OF A POWER INJECTION SYSTEM
1707:H	T1	US	MALLINCKRODT LLC	Granted	11/551792	10/23/2006	7725168	5/25/2010	POWERHEAD OF A POWER INJECTION SYSTEM
1707:H	T2	US	MALLINCKRODT LLC	Granted	12/759805	10/23/2006	8251071	8/28/2012	POWERHEAD OF A POWER INJECTION SYSTEM
1709:H	DV1	US	MALLINCKRODT LLC	Published	11/073910	3/7/2005			IMPROVMENTS TO POWERHEAD CONTROL IN A POWER INJECTION SYSTEM
1709:H	DV2	US	MALLINCKRODT LLC	Published	11/073915	3/7/2005			IMPROVMENTS TO POWERHEAD CONTROL IN A POWER INJECTION SYSTEM
1709:H	DV3	US	MALLINCKRODT LLC	Granted	12/796203	3/7/2005	8663166	3/4/2014	IMPROVMENTS TO POWERHEAD CONTROL IN A POWER INJECTION SYSTEM
1721:H		US	MALLINCKRODT LLC	Granted	12/445501	4/14/2009	8439863	5/14/2013	METHODS FOR CONTROLLING MEDICAL FLUID INJECTIONS
1721:H	C1	US	MALLINCKRODT LLC	Published	12/615534	11/10/2009			METHODS FOR CONTROLLING MEDICAL FLUID INJECTIONS
1743:H		US	MALLINCKRODT LLC	Granted	12/439212	2/27/2009	8133198	3/13/2012	MEDICAL FLUID INJECTOR HAVING A THERMO-MECHANICAL DRIVE
1743:H	D1	US	MALLINCKRODT LLC	Granted	13/364108	2/1/2012	8486008	7/16/2013	MEDICAL FLUID INJECTOR HAVING A THERMO-MECHANICAL DRIVE

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1749:H		US	MALLINCKRODT LLC	Published	12/679362	3/22/2010			INJECTION MONITOR
1759:H		US	MALLINCKRODT LLC	Published	12/742928	5/14/2010			FLUID DELIVERY SYSTEM WITH MULTI-DOSE FLUID SOURCE
1759:H	D1	US	MALLINCKRODT LLC	Published					FLUID DELIVERY SYSTEM WITH MULTI-DOSE FLUID SOURCE
H-MI-00021		US	MALLINCKRODT LLC	Granted	12/444162	4/3/2009	8657787	2/25/2014	INJECTOR HAVING LOW INPUT POWER
H-MI-00091		US	MALLINCKRODT LLC	Published	12/179129	7/24/2008			POWER INJECTOR WITH MOVABLE JOINT-INTEGRATED SIGNAL TRANSMISSION CONNECTOR
H-MI-00095		US	MALLINCKRODT LLC	Published	12/296142	10/6/2008			UNIVERSAL ADAPTER FOR A SYRINGE PLUNGER
H-MI-00096		US	MALLINCKRODT LLC	Granted	12/439184	2/27/2009	8141417	3/27/2012	SYRINGE CONTENT DETECTION USING RF ENERGY
H-MI-00097		US	MALLINCKRODT LLC	Published	11/551804	10/25/2006			POWERHEAD CONTROL IN A POWER INJECTOR SYSTEM
H-MI-00106		US	MALLINCKRODT LLC	Granted	12/665739	12/21/2009	8308689	11/13/2012	DRIVE RAM FOR MEDICAL INJECTORS
H-MI-00106	C1	US	MALLINCKRODT LLC	Published	13/646848	10/8/2012			DRIVE RAM FOR MEDICAL INJECTORS
H-MI-00110		US	MALLINCKRODT LLC	Granted	12/374059	1/16/2009	8038182	10/18/2011	BREAKAGE RESISTANT FITTING
H-MI-00119		US	MALLINCKRODT LLC	Granted	11/567011	12/5/2006	8454560	6/4/2013	SYRINGE MOUNT FOR A MEDICAL FLUID INJECTOR
H-MI-00119	D1	US	MALLINCKRODT LLC	Pending	13/890815	5/9/2013			POWER INJECTOR SYRINGE FLANGE ACUATED MOUNTING METHOD
H-MI-00135		US	MALLINCKRODT LLC	Published	12/921785	9/10/2010			MULTI-FUNCTION, FOOT-ACTIVATED CONTROLLER FOR IMAGING SYSTEM
H-MI-00155		US	MALLINCKRODT LLC	Published	13/146299	7/26/2011			HAND-ACTUATED SYRINGE WITH VACUUM CHAMBER FOR AUTO REFILL
H-MI-00159		US	MALLINCKRODT LLC	Published	12/921839	9/10/2010			FOOT-ACTIVATED CONTROLLER FOR MEDICAL SYSTEM
H-MI-00160		US	MALLINCKRODT LLC	Published	12/746192	6/4/2010			PUSH TO INSTALL SYRINGE MOUNT FOR POWERED INJECTOR SYSTEMS
H-MI-00163		US	MALLINCKRODT LLC	Published	12/676968	3/8/2010			POWER INJECTOR WITH HELP FUNCTIONALITY
H-MI-00166		US	MALLINCKRODT LLC	Granted	12/742938	5/14/2010	8348896	1/8/2013	PATENCY CHECK WITH PRESSURE MONITORING
H-MI-00167		US	MALLINCKRODT LLC	Granted	12/742934	5/14/2010	8377003	2/19/2013	POWER INJECTOR WITH RAM RETRACTION

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CaseNumber	SubCase	Country	Owner Name	Application Status	AppNumber	Filing Date	Patent Number	Issue Date	Title
H-MI-00167	C1	US	MALLINCKRODT LLC	Published	13/670506	11/7/2012			POWER INJECTOR WITH RAM RETRACTION
H-MI-00168		US	MALLINCKRODT LLC	Granted	12/742943	5/14/2010	8500677	8/6/2013	POWER INJECTOR WITH FLOW RATE ASSESSMENT
H-MI-00168	C1	US	MALLINCKRODT LLC	Pending	13/869822	4/24/2013			POWER INJECTOR WITH FLOW RATE ASSESSMENT
H-MI-00170		US	MALLINCKRODT LLC	Published	12/742930	5/14/2010			POWER INJECTOR WITH STATUS MESSAGING
H-MI-00178		US	MALLINCKRODT LLC	Granted	13/055764	1/25/2011	8409134	4/2/2013	POWER INJECTOR HAVING CALIBRATED PRESSURE MONITORING FUNCTIONALITY
H-MI-00180		US	MALLINCKRODT LLC	Published	12/921787	9/10/2010			FOOT-ACTIVATED CONTROLLER FOR IMAGING SYSTEM
H-MI-00186		US	MALLINCKRODT LLC	Granted	13/056177	1/27/2011	8562563	10/22/2013	POWER INJECTOR SYRINGE CLAMP ASSEMBLY WITH RFID ANTENNA READER
H-MI-00187		US	MALLINCKRODT LLC	Published	13/260578	9/27/2011			MEDICAL FLUID DELIVERY SYSTEM WITH RFID-EQUIPPED WAND
H-MI-00187	C1	US	MALLINCKRODT LLC	Pending	14/173190	2/5/2014			MEDICAL FLUID DELIVERY SYSTEM WITH RFID-EQUIPPED WAND
H-MI-00189		US	MALLINCKRODT LLC	Published	13/260575	9/27/2011			MEDICAL FLUID DELIVERY SYSTEM WITH REUSABLE RFID FIXTURE
H-MI-00204		US	MALLINCKRODT LLC	Granted	13/133290	6/7/2011	8417320	4/9/2013	SYRINGE WITH VISUAL USE INDICATOR
H-MI-00204	D1	US	MALLINCKRODT LLC	Pending	13/794141	3/11/2013			SYRINGE WITH VISUAL USE INDICATOR
H-MI-00210		US	MALLINCKRODT LLC	Published	12/810149	6/23/2010			POWER INJECTOR WITH DECAY CONSTANT FUNCTIONALITY
H-MI-00212		US	MALLINCKRODT LLC	Published	12/996989	12/9/2010			POWER INJECTOR WITH KEEP OPEN VEIN OPEN FUNCTIONALITY
H-MI-00214		US	MALLINCKRODT LLC	Granted	13/144304	7/13/2011	8628514	1/14/2014	MULTI-DOSE MEDICAL FLUID INJECTION SYSTEM HAVING PATIENT-SPECIFIC TUBING SET WITH USE INDICATOR
H-MI-00214	C1	US	MALLINCKRODT LLC	Pending	14/092483	11/27/2013			MULTI-DOSE MEDICAL FLUID INJECTION SYSTEM HAVING PATIENT-SPECIFIC TUBING SET WITH USE INDICATOR

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CaseNumber	SubCase	Country	Owner Name	Application Status	AppNumber	Filing Date	Patent Number	Issue Date	Title
H-MI-00219		US	MALLINCKRODT LLC	Published	13/263087	10/6/2011			VACUUM ASSIST SYRINGE FILLING
H-MI-00225		US	MALLINCKRODT LLC	Pending	14/232305	1/13/2014			INJECTION SYSTEM WITH CAPACITIVE SENSING
H-MI-00227		US	MALLINCKRODT LLC	Published	13/139544	6/14/2011			PIEZOELECTRICALLY-DRIVEN POWER INJECTOR
H-MI-00237		US	MALLINCKRODT LLC	Published	12/811104	6/29/2010			AUTOMATIC INJECTOR RAM HOMING
H-MI-00238		US	MALLINCKRODT LLC	Published	14/003893	9/9/2013			Apparatus and Method to Determine Contrast Media Injection Parameters to Control Signal Intensity During Magnetic Resonance Angiography
H-MI-00262		US	MALLINCKRODT LLC	Granted	12/996466	12/6/2010	8431074	4/30/2013	ULTRAVIOLET TUBING AND TIP STERILIZER
H-MI-00267		US	MALLINCKRODT LLC	Published	13/201632	8/16/2011			SYSTEMS AND METHOD FOR ASSESSING FUNCTIONALITY OF DUAL CHECK VALVE ARRANGEMENTS IN MEDICAL TUBING SETS
H-MI-00300		US	MALLINCKRODT LLC	Pending	14/131764	1/9/2014			INJECTION DATA MANAGEMENT SYSTEM AND METHOD
H-MI-00304		US	MALLINCKRODT LLC	Published	13/876040	3/26/2013			CONTRAST MEDIA MANAGEMENT USING PATIENT RENAL FUNCTION
H-MI-00310		US	MALLINCKRODT LLC	Published	13/520202	7/2/2012			SYRINGE PRODUCTS AND RELATED METHODS AND USES
H-MI-00329		US	MALLINCKRODT LLC	Published	13/988800	5/22/2013			MEDICAL FLUID INJECTOR SYSTEM
H-MI-00333		US	MALLINCKRODT LLC	Pending	14/115363	11/4/2013			CONTRAST MEDIA INJECTION DATA MANAGEMENT SYSTEM
H-MI-00370	P1	US	MALLINCKRODT LLC	Pending	61/858189	7/25/2013			INJECTOR WITH PIEZO MOTOR SYSTEM WITH WAVE FORM TUNING
11:H		US	MALLINCKRODT LLC	Published	12/374051	1/16/2009			RADIATION SHIELDED SYRINGE ASSEMBLY AND USES THEREOF
MI-00028		US	MALLINCKRODT LLC	Published	13/063810	3/14/2011			DROP-IN PIG INJECTOR
H-MI-00048		US	MALLINCKRODT LLC	Granted	12/063452	2/11/2008	7772565	8/10/2010	RADIATION-SHIELDING ASSEMBLY HAVING CONTAINER LOCATION FEATURE
H-MI-00050		US	MALLINCKRODT LLC	Granted	11/995732	1/15/2008	7812322	10/12/2010	RADIATION-SHIELDING ASSEMBLIES AND METHODS

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CaseNumber	SubCase	Country	Owner Name	Application Status	AppNumber	Filing Date	Patent Number	Issue Date	Title
H-MI-00070		US	MALLINCKRODT LLC	Granted	12/067186	3/18/2008	7838844	11/23/2010	RADIOPHARMACEUTICAL SYSTEM AND METHOD OF UTILIZING RADIO-FREQUENCY IDENTIFICATION TAGS
H-MI-00072		US	MALLINCKRODT LLC	Granted	11/995744	1/15/2008	8003967	8/23/2011	RADIATION-SHIELDING ASSEMBLIES AND METHODS OF USING THE SAME
H-MI-00072	D1	US	MALLINCKRODT LLC	Granted	13/107365	5/13/2011	8633461	1/21/2014	RADIATION-SHIELDING ASSEMBLIES AND METHODS OF USING THE SAME
H-MI-00072	D2	US	MALLINCKRODT LLC	Granted	13/107407	5/13/2011	8288744	10/16/2012	RADIATION-SHIELDING ASSEMBLIES AND METHODS OF USING THE SAME
H-MI-00072	D3	US	MALLINCKRODT LLC	Granted	13/107428	5/13/2011	8513632	8/20/2013	RADIATION-SHIELDING ASSEMBLIES AND METHODS OF USING THE SAME
H-MI-00072	D4	US	MALLINCKRODT LLC	Granted	13/107446	5/13/2011	8362452	1/29/2013	RADIATION-SHIELDING ASSEMBLIES AND METHODS OF USING THE SAME
1088:H		US	MALLINCKRODT LLC	Granted	09/889538	7/18/2001	6773686	8/10/2004	Process for the Purification and Concentration of Radiiodide Isotopes
1098:H		US	MALLINCKRODT LLC	Granted	08/865995	5/30/1997	5944190	8/31/1999	Radiopharmaceutical Capsule Safe
1196:H		US	MALLINCKRODT LLC	Granted	09/403704	4/21/1998	6344178B1	2/5/2002	Method for the Preparation of Facial Metal Tricarbonyl Compounds and their Use in the Labelling of Biologically Active Substrates
1217:H	1	US	MALLINCKRODT LLC	Granted	10/248668	2/6/2003	6866837	3/15/2005	Radiolabeled Peptides for the Diagnosis and Treatment of Breast and Prostate Tumors and Metastases of such tumors
1373:H		US	MALLINCKRODT LLC	Granted	10/089036	3/25/2002	7053242	5/30/2006	CARBON MONOXIDE SOURCE FOR THE PREPARATION OF TRANSITION METAL CARBONYL COMPLEXES
1473:H	1	US	MALLINCKRODT LLC	Granted	11/237374	9/28/2005	7188725	3/13/2007	CARBON MONOXIDE SOURCE FOR THE PREPARATION OF TRANSITION METAL CARBONYL COMPLEXES
1583:H		US	MALLINCKRODT LLC	Granted	10/510454	10/4/2004	8182788	5/22/2012	METHOD FOR OBTAINING A 2-18F-FLUOR-2-DEOXY-D-GLUCOSE 18F-FDG-SOLUTION
1545:H		US	MALLINCKRODT LLC	Granted	10/475696	5/14/2004	7589061	9/15/2009	Tc and Re LABELER RADIOACTIVE GLYCOSYLATED OCTREOTIDE DERIVATIVES

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1545:H	D1	US	MALLINCKRODT LLC	Granted	12/556698	9/10/2009	8575100	11/5/2013	Tc and Re LABELER RADIOACTIVE GLYCOSYLATED OCTREOTIDE DERIVATIVES
1628:H		US	MALLINCKRODT LLC	Granted	10/527301	3/9/2005	7165672	1/23/2007	POLYMER PIG
1628:H	C1	US	MALLINCKRODT LLC	Granted	11/486197	7/13/2006	7495246	2/24/2009	RADIOPHARMACEUTICAL PIG
1628:H	C2	US	MALLINCKRODT LLC	Granted	11/545638	10/10/2006	8269201	9/18/2012	METHODS OF USING AND MAKING RADIOPHARMACEUTICAL PIGS
1628:H	C3	US	MALLINCKRODT LLC	Granted	11/956835	12/14/2007	7692173	4/6/2010	RADIOPHARMACEUTICAL PIG
1628:H	C4	US	MALLINCKRODT LLC	Granted	12/486489	6/17/2009	7918009	4/5/2011	METHODS OF USING RADIOPHARMACEUTICAL PIGS
1628:H	C5	US	MALLINCKRODT LLC	Granted	12/544656	8/20/2009	7918010	4/5/2011	METHODS OF USING RADIOPHARMACEUTICAL PIGS
1641:H		US	MALLINCKRODT LLC	Granted	29/170443	11/6/2002	D488864	4/20/2004	ORNAMENTAL DESIGN FOR A PHARMACEUTICAL PIG
1657:H		US	MALLINCKRODT LLC	Granted	10/551119	9/23/2005	7452324	11/18/2008	RADIATION SHIELD FOR A SAFETY SYRINGE HAVING A NEEDLE SHEATH
1660:H		US	MALLINCKRODT LLC	Granted	10/551292	9/28/2005	7682601	3/23/2010	BIFUNCTIONAL TRIDENTATE PYRAZOLYL CONTAINING LIGANDS FOR Re AND Tc TRICARBONYL COMPLEXES
1684:H		US	MALLINCKRODT LLC	Granted	10/985442	11/10/2004	7343724	3/18/2008	SEMI-AUTOMATED IODINE CUSTOM CAPSULE DISPENSING AND ASSEMBLY MACHINE
1722:H		US	MALLINCKRODT LLC	Granted	11/632804	1/16/2007	7753835	7/13/2010	Radiation-Shielding Container Assemblies, Radioactive Material Administration Devices, and Methods of Using the Same
1660:H		US	MALLINCKRODT LLC	Published	12/097553	6/16/2008			TRIPODAL LIGANDS WITH THE COORDINATION MOTIFS K2-BH2 OR K3-BH3 RELEVANT FOR BIOMEDICAL APPLICATIONS OF ORGANOMETALLIC COMPLEXES
H-MI-00011		US	MALLINCKRODT LLC	Granted	11/815237	8/1/2007	7901667	3/8/2011	BRIDGEHEAD LABELLED COMPOUNDS AND METHODS OF USING THE SAME

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H-MI-00025		US	MALLINCKRODT LLC	Granted	12/280370	8/22/2008	8119103	2/21/2012	BIFUNCTIONAL RESORCINOL, THIORESORCINOL, AND DITHIORESORCINOL DERIVATIVES METAL CHELATING CONJUGATES
H-MI-00079		US	MALLINCKRODT LLC	Published	13/120537	3/23/2011			A VERSION OF FDG DETECTABLE BY SINGLE-PHOTON EMISSION COMPUTED TOMOGRAPHY
H-MI-00098		US	MALLINCKRODT LLC	Granted	12/282399	9/10/2008	8193347	6/5/2012	METAL COMPLEXES OF TETRAAZOMACROCYCLE DERIVATIVES
H-MI-00098	D1	US	MALLINCKRODT LLC	Published	13/465223	5/7/2012			METAL COMPLEXES OF TETRAAZOMACROCYCLE DERIVATIVES
H-MI-00100		US	MALLINCKRODT LLC	Published	12/282420	9/10/2008			CHELATING CONJUGATES HAVING A SUBSTITUTED AROMATIC MOIETY AND DERIVATIVES THEREOF
H-MI-00122		US	MALLINCKRODT LLC	Granted	12/518645	12/11/2007	8170172	5/1/2012	TARGET BODIES AND USES THEREOF IN THE PRODUCTION OF RADIOISOTOPE MATERIALS
H-MI-00122	D1	US	MALLINCKRODT LLC	Granted	13/446008	4/13/2012	8524006	9/3/2013	TARGET BODIES AND USES THEREOF IN THE PRODUCTION OF RADIOISOTOPE MATERIALS
H-MI-00134		US	MALLINCKRODT LLC	Granted	12/515325	5/18/2009	8372379	2/12/2013	TRICARBONYL COMPLEXES WITH TRIDENTATE CHELATORS FOR MYOCARDIUM IMAGING
H-MI-00134	C1	US	MALLINCKRODT LLC	Published	13/742147	1/15/2013			TRICARBONYL COMPLEXES WITH TRIDENTATE CHELATORS FOR MYOCARDIUM IMAGING
H-MI-00134	D1	US	MALLINCKRODT LLC	Published	13/742154	1/15/2013			TRICARBONYL COMPLEXES WITH TRIDENTATE CHELATORS FOR MYOCARDIUM IMAGING
H-MI-00148		US	MALLINCKRODT LLC	Granted	12/441919	3/19/2009	8431909	4/30/2013	SELF-ALIGNING RADIOISOTOPE ELUTION SYSTEM
H-MI-00148	C1	US	MALLINCKRODT LLC	Pending	13/855971	4/3/2013			SELF-ALIGNING RADIOISOTOPE ELUTION SYSTEM
H-MI-00148	D1	US	MALLINCKRODT LLC	Published	13/303723	3/19/2009			SELF-ALIGNING RADIOISOTOPE ELUTION SYSTEM

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H-MI-00148	S1	US	MALLINCKRODT LLC	Granted	29/279647	5/4/2007	D607117	12/29/2009	SELF-ALIGNING RADIOISOTOPE ELUTION SYSTEM
H-MI-00148	S2	US	MALLINCKRODT LLC	Granted	29/306411	5/4/2007	D589157	3/24/2009	SELF-ALIGNING RADIOISOTOPE ELUTION SYSTEM
H-MI-00148	S3	US	MALLINCKRODT LLC	Granted	29/346942	11/9/2009	D617910	6/15/2010	SELF-ALIGNING RADIOISOTOPE ELUTION SYSTEM
H-MI-00162		US	MALLINCKRODT LLC	Granted	12/676197	3/3/2010	8318113	11/27/2012	PURIFICATION OF METALS
H-MI-00162	C1	US	MALLINCKRODT LLC	Pending	13/676219	11/14/2012			PURIFICATION OF METALS
H-MI-00177	S1	US	MALLINCKRODT LLC	Granted	29/295648	10/3/2007	D602164	10/13/2009	RADIATION SHIELDING CONTAINER PORTION
H-MI-00208		US	MALLINCKRODT LLC	Granted	12/919528	8/26/2010	8563907	10/22/2013	RADIOPHARMACEUTICAL HEATER
H-MI-00277		US	MALLINCKRODT LLC	Published	13/808721	1/7/2013			SLURRY DISPENSER FOR RADIOISOTOPE PRODUCTION
H-MI-00278		US	MALLINCKRODT LLC	Published	13/808707	1/7/2013			HORIZONTAL MIXER WITH CENTER-ANGLED BLADES
H-MI-00297		US	MALLINCKRODT LLC	Published	13/814088	2/4/2013			PURIFICATION PROCESS
H-MI-00306		US	MALLINCKRODT LLC	Pending	13/878252	4/8/2013			EXTRACTION PROCESS
H-MI-00315		US	MALLINCKRODT LLC	Pending	14/131921	1/10/2014			Process
H-MI-00322		US	MALLINCKRODT LLC	Published	13/978725	7/9/2013			PROCESS AND APPARATUS FOR TREATING A GAS STREAM
H-MI-00327	DN1	US	MALLINCKRODT LLC	Granted	29/383507	1/19/2011	D657886	4/17/2012	RADIATION SHIELDING CONTAINER LID
H-MI-00327	S2	US	MALLINCKRODT LLC	Granted	29/397602	7/19/2011	D683466	5/28/2013	RADIATION SHIELDING CONTAINER LID
H-MI-00327	T1	US	MALLINCKRODT LLC	Granted	13/185657	7/19/2011	8421044	4/16/2013	RADIATION SHIELDING LID FOR AN AUXILIARY SHIELD ASSEMBLY OF A RADIOISOTOPE ELUTION SYSTEM
H-MI-00328		US	MALLINCKRODT LLC	Published	13/353888	1/19/2012			RADIOISOTOPE ELUTION SYSTEM
H-MI-00339		US	MALLINCKRODT LLC	Published	13/353923	1/19/2012			HOLDER AND TOOL FOR RADIOISOTOPE ELUTION SYSTEM
H-MI-00342		US	MALLINCKRODT LLC	Pending	13/802935	3/14/2013			VARIABLE THROW CORING-FREE VALVE

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H-MI-00345		US	MALLINCKRODT LLC	Pending	13/800248	3/13/2013			SYSTEMS AND METHODS FOR ASSAYING AN ELUATE FOR TECHNETIUM AND MOLYBDENUM CONTENT
H-MI-00351	T1	US	MALLINCKRODT LLC	Published	13/626473	9/25/2012			PROTECTIVE SHROUD FOR NUCLEAR PHARMACY GENERATORS
H-MI-00372	P1	US	MALLINCKRODT LLC	Pending	61/840103	6/27/2013			PROCESS OF GENERATING GERMANIUM
H-MI-00373	P1	US	MALLINCKRODT LLC	Pending	61/878476	9/16/2013			SEPARATION OF TUNGSTEN-187/-188 FROM MOLYBDENUM-99 PRODUCTION STREAM VIA CHROMATOGRAPHIC COLUMN
H-MI-00374	P1	US	MALLINCKRODT LLC	Pending	61/878446	9/16/2013			SEPARATION OF TUNGSTEN-187/-188 FROM MOLYBDENUM-99 PRODUCTION STREAM VIA TUNGSTEN PRECIPITATION
H-MI-00375	P1	US	MALLINCKRODT LLC	Pending	61/878466	9/16/2013			URANIUM TARGET FOR MO-99 PRODUCTION USING LOW ENRICHED URANIUM
M0848:H		US	MALLINCKRODT LLC	Granted	188507	1/28/1994	5619545	4/8/1997	PROCESS FOR PURIFICATION OF RADIOIODIDES
M0914:H		US	MALLINCKRODT LLC	Granted	480373	6/7/1995	5830431	11/3/1998	PEPTIDE COMPOSITIONS AND METHOD OF RELABELING
M0914:H	A	US	MALLINCKRODT LLC	Granted	08/989434	12/12/1997	5804157	9/8/1998	PEPTIDE COMPOSITIONS AND METHOD OF RELABELING
1576:H		US	MALLINCKRODT LLC	Granted	10/186764	7/1/2002	6946060	9/20/2005	PURIFICATION OF N,N-DIMETHYL ACETIAMIDE WITH ACETIC ACID PRESENT
76:H	X1	US	MALLINCKRODT LLC	Granted	90/007967	3/10/2006	6946060	10/9/2007	PURIFICATION OF N,N-DIMETHYL ACETIAMIDE WITH ACETIC ACID PRESENT
1008:H		US	MALLINCKRODT LLC	Granted	08/863647	5/27/1997	6245318	6/12/2001	Selectively Binding Ultrasound Contrast Agents
1159:H	1	US	MALLINCKRODT LLC	Granted	10/798486	3/11/2004	7374745	5/20/2008	Acoustically efficient formulations for ultrasound contrast New Title: Novel Ultrasound Contrast Agents

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1260:H		US	MALLINCKRODT LLC	Granted	09/932291	8/17/2001	7087212	8/8/2006	Multicomponent Assemblies Having Enhanced Binding Properties For Diagnosis and Therapy
1260:H	D1	US	MALLINCKRODT LLC	Granted	11/462591	8/4/2006	7713514	5/11/2010	Multicomponent Assemblies Having Enhanced Binding Properties For Diagnosis and Therapy
1260:H	D2	US	MALLINCKRODT LLC	Granted	12/603402	10/21/2009	8257683	9/4/2012	Multicomponent Assemblies Having Enhanced Binding Properties For Diagnosis and Therapy
1260:H	D3	US	MALLINCKRODT LLC	Granted	12/603438	10/21/2009	8246930	8/21/2012	Multicomponent Assemblies Having Enhanced Binding Properties For Diagnosis and Therapy
1260:H	D4	US	MALLINCKRODT LLC	Granted	12/834463	7/12/2010	8303932	11/6/2012	Multicomponent Assemblies Having Enhanced Binding Properties For Diagnosis and Therapy
1260:H	D5	US	MALLINCKRODT LLC	Granted	12/834521	7/12/2010	8303933	11/6/2012	Multicomponent Assemblies Having Enhanced Binding Properties For Diagnosis and Therapy
M0897:H		US	MALLINCKRODT LLC	Granted	405484	3/16/1995	5519984	5/28/1996	Method for Packaging A Pressure or Vacuum Sensitive Product
1667:H		US	MALLINCKRODT LLC	Published	10/588674	8/8/2006			LOW OSMOLAR X-RAY CONTRAST MEDIA FORMULATIONS
1699:H		US	MALLINCKRODT LLC	Granted	12/811833	7/7/2010	8445725	5/21/2013	PROCESS FOR THE PREPARATION OF IOSIMENOL
1699:H	D1	US	MALLINCKRODT LLC	Published	13/772572	2/21/2013			PROCESS FOR THE PREPARATION OF IOSIMENOL
MI-00161		US	MALLINCKRODT LLC	Granted	12/675130	2/25/2010	8420857	4/16/2013	REMOVAL OF SILICA FROM WATER SOLUBLE COMPOUNDS BY NANOFILTRATION AND REVERSE PHASE CHROMATOGRAPHY
H-MI-00341		US	MALLINCKRODT LLC	Pending	14/149027	1/7/2014			AN IMPROVED SYNTHESIS OF THE CHEMICAL INTERMEDIATE N1, N3-BIS(2,3-DIHYDROXYPROPYL)-5-NITROISOPHTHALAMIDE
M0906:H		US	MALLINCKRODT LLC	Granted	482380	6/7/1995	5648536	7/15/1997	Process For Producing Ioversol
M0908:H		US	MALLINCKRODT LLC	Granted	08/593775	1/29/1996	6596904	7/22/2003	Process for Producing Ioversol

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H-PR-00015		US	MALLINCKRODT LLC	Published	13/599777	8/30/2012			REMOTE ASSEMBLY OF TARGETED NANOPARTICLES USING H-PHOSPHONAT-ENE/YNE HYDROPHOSPHONYLATION REACTIONS
H-PR-00016		US	MALLINCKRODT LLC	Published	13/241368	9/23/2011			APTAMER CONJUGATES FOR TARGETING OF THERAPEUTIC AND/OR DIAGNOSTIC NANOCARRIERS
H-PR-00017		US	MALLINCKRODT LLC	Published	13/599819	8/30/2012			NANOPARTICLE PEG MODIFICATION WITH H-PHOSPHONATES
H-PR-00017	P1	US	MALLINCKRODT LLC	Pending	61/529694	8/31/2011			NANOPARTICLE PEG MODIFICATION WITH H-PHOSPHONATES
H-PR-00036		US	MALLINCKRODT LLC	Published	13/664457	10/31/2012			COMBINATIONAL LIPOSOME COMPOSITIONS FOR CANCER THERAPY
H-PR-00042		US	MALLINCKRODT LLC	Pending	13/689694	11/29/2012			MMP-TARGETED THERAPEUTIC AND/OR DIAGNOSTIC NANOCARRIERS
H-PR-00047	P1	US	MALLINCKRODT LLC	Pending	61/780272	3/13/2013			LIPOSOME COMPOSITIONS CONTAINING CISPLATIN FOR CANCER THERAPY
H-PR-00048	P1	US	MALLINCKRODT LLC	Pending	61/780000	3/13/2013			LIPOSOME COMPOSITIONS CONTAINING OXALIPLATIN FOR CANCER THERAPY
H-PR-00059	P1	US	MALLINCKRODT LLC	Pending	61/779902	3/13/2013			SYNTHESIS AND USE OF PEGylated LIPOSOMAL DOCETAXEL PRO-DRUG- UNEXPECTED ENHANCEMENT IN PERFORMANCE
H-PR-00064	P1	US	MALLINCKRODT LLC	Pending	61/791387	3/15/2013			MATRIX METALLOPROTEASE (MMP) TARGETED AGENTS FOR IMAGING AND THERAPY
H-MP-00142		US	MALLINCKRODT LLC	Granted	13/015490	1/27/2011	8490795	7/23/2013	CONTAINER AND METHOD FOR FACILITATING DISPOSAL OF UNUSED PHARMACEUTICAL PRODUCT
H-MP-00142	D1	US	MALLINCKRODT LLC	Published	13/925680	6/24/2013			CONTAINER AND METHOD FOR FACILITATING DISPOSAL OF UNUSED PHARMACEUTICAL PRODUCT
H-MP-00143		US	MALLINCKRODT LLC	Published	13/014876	1/27/2011			DISPOSABLE TRANSDERMAL PATCH PACKAGING

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H-MP-00148		US	MALLINCKRODT LLC	Published	13/015498	1/27/2011			PHARMACEUTICAL PRODUCT CONTAINER WITH MOTION SENSOR AND ALARM
H-MP-00149		US	MALLINCKRODT LLC	Published	13/014896	1/27/2011			APPARATUSES AND METHODS FOR STORING PHARMACEUTICAL PRODUCT
H-MP-00153		US	MALLINCKRODT LLC	Published	13/015480	1/27/2011			SYSTEMS AND METHODS FOR MANAGING USE OF A MEDICAMENT
H-MP-00158		US	MALLINCKRODT LLC	Published	13/015223	1/27/2011			SYSTEMS AND METHOD FOR TIMING DOSAGE PERIODS
H-MP-00160		US	MALLINCKRODT LLC	Published	13/103203	5/9/2011			PHARMACEUTICAL PRODUCT CONTAINER WITH PERMANENT LOCKING MECHANISM
H-MP-00162		US	MALLINCKRODT LLC	Published	13/103234	5/9/2011			PEN-TYPE PHARMACEUTICAL PRODUCT DISPENSER
H-MP-00164		US	MALLINCKRODT LLC	Published	13/103266	5/9/2011			METHOD AND APPARATUS FOR DISPOSAL OF A PHARMACEUTICAL PRODUCT BLISTER CARD
H-MP-00166		US	MALLINCKRODT LLC	Granted	13/103247	5/9/2011	8342331	1/1/2013	SEALABLE SECONDARY PACKAGING FOR PHARMACEUTICAL PRODUCT BLISTER PACK
H-MP-00166	D1	US	MALLINCKRODT LLC	Granted	13/691766	12/1/2012	8627957	1/14/2014	SEALABLE SECONDARY PACKAGING FOR PHARMACEUTICAL PRODUCT BLISTER PACK
H-MP-00166	D2	US	MALLINCKRODT LLC	Pending	14/092559	11/27/2013			SEALABLE SECONDARY PACKAGING FOR PHARMACEUTICAL PRODUCT BLISTER PACK
H-MP-00170		US	MALLINCKRODT LLC	Published	13/215864	8/23/2011			PHARMACEUTICAL PRODUCT BLISTER PACK LOCKABLE WITHIN SECONDARY PACKAGING
H-MP-00172		US	MALLINCKRODT LLC	Published	13/272904	10/13/2011			DISPOSABLE TRANSDERMAL PATCH CONTAINMENT
1532:H		US	MALLINCKRODT LLC	Granted	10/554133	10/20/2005	7691880	4/6/2010	Methylphenidate HCl Oral Solution
1653:H		US	MALLINCKRODT LLC	Granted	10/558591	11/29/2005	7456306	11/25/2008	Stearate Composition and Method of production thereof
1653:H	CP	US	MALLINCKRODT LLC	Granted	11/154849	6/16/2005	7385068	6/10/2008	Improved Stearate Composition and Method

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1673:H		US	MALLINCKRODT LLC	Published	11/909270	9/21/2007			MATRIX-BASED PULSE RELEASE PHARMACEUTICAL FORMULATION
H-MP-00047		US	MALLINCKRODT LLC	Published	12/299944	11/7/2008			ZERO-ORDER MODIFIED RELEASE SOLID DOSAGE FORMS
H-MP-00200		US	MALLINCKRODT LLC	Published	13/865244	4/18/2013			TAMPER-RESISTANT, IMMEDIATE RELEASE PHARMACEUTICAL COMPOSITIONS COMPRISING SODIUM BENTONITE
H-MP-00202		US	MALLINCKRODT LLC	Published	13/865286	4/18/2013			TAMPER-RESISTANT, IMMEDIATE RELEASE PHARMACEUTICAL COMPOSITIONS
1443:H		US	MALLINCKRODT LLC	Granted	10/495503	5/13/2004	7323565	1/29/2008	METHOD FOR THE CATALYTIC PRODUCTION OF HYDROCODONE AND HYDROMORPHONE
1443:H	CP	US	MALLINCKRODT LLC	Granted	10/973031	10/25/2004	7321038	1/22/2008	METHOD FOR THE CATALYTIC PRODUCTION OF HYDROCODONE AND HYDROMORPHONE
1443:H	P2T	US	MALLINCKRODT LLC	Granted	11/369401	3/7/2006	7399858	7/15/2008	METHOD FOR THE CATALYTIC PRODUCTION OF HYDROCODONE AND HYDROMORPHONE AND DERIVATIVES THEREOF
1585:H		US	MALLINCKRODT LLC	Granted	10/530446	4/5/2005	7285665	10/23/2007	PROCESS FOR THE PREPARATION OF QUATERNARY N-ALKYL MORPHINAN ALKALOID SALTS
1596:H		US	MALLINCKRODT LLC	Granted	10/274702	10/21/2002	6579985	6/17/2003	PREPARATION OF CODEINE FROM MORPHINE
1616:H		US	MALLINCKRODT LLC	Granted	11/578627	10/16/2006	7495098	2/24/2009	EXTRACTION OF ALKALOIDS FROM OPIUM
1618:H		US	MALLINCKRODT LLC	Granted	10/581418	6/2/2006	7312368	12/25/2007	METHOD FOR SELECTIVE REDUCTION OF AROMATIC COMPOUNDS
1626:H		US	MALLINCKRODT LLC	Granted	10/537965	6/9/2005	7244865	7/17/2007	IMPROVED PROCESS FOR PREPARING BENZHYDRYTHIOACETAMIDE
1661:H		US	MALLINCKRODT LLC	Granted	10/570243	2/28/2006	7345188	3/18/2008	PROCESS FOR PREPARING BENZHYDRYLTHIOACETAMIDE
1665:H		US	MALLINCKRODT LLC	Granted	11/718263	4/30/2007	7834184	11/16/2010	OPIATE INTERMEDIATES AND METHODS OF SYNTHESIS

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1665:H	D1	US	MALLINCKRODT LLC	Granted	11/741910	4/30/2007	7511060	3/31/2009	OPIATE INTERMEDIATES AND METHODS OF SYNTHESIS
1665:H	D2	US	MALLINCKRODT LLC	Granted	11/741932	4/30/2007	7622586	11/24/2009	OPIATE INTERMEDIATES AND METHODS OF SYNTHESIS
1669:H		US	MALLINCKRODT LLC	Published	11/915606	11/27/2007			PROCESSES FOR PREPARING MORPHINAN-6-ONE PRODUCTS WITH LOW LEVELS OF ALPHA, BETA-UNSATURATED KETONE COMPOUNDS
1669:H	C1	US	MALLINCKRODT LLC	Pending	13/294546	11/11/2011			PROCESSES FOR PREPARING MORPHINAN-6-ONE PRODUCTS WITH LOW LEVELS OF ALPHA, BETA-UNSATURATED KETONE COMPOUNDS
1675:H		US	MALLINCKRODT LLC	Granted	10/585006	6/28/2006	7498434	3/3/2009	TWO-PHASE PROCESS FOR THE SYNTHESIS OF SELECTED PRYAZOLOPYRIMIDINES
1679:H		US	MALLINCKRODT LLC	Granted	10/574545	4/5/2006	7728145	6/1/2010	INDUSTRIAL METHOD FOR SEPARATION AND PURIFICATION OF FENTANYL BY REVERSE PHASE PREPARATIVE CHROMATOGRAPHY
1690:H		US	MALLINCKRODT LLC	Granted	11/576059	3/27/2007	7692013	4/6/2010	METHOD FOR SEPARATION AND PURIFICATION OF HYDROCODONE BY PREPARATIVE CHROMATOGRAPHY
1706:H		US	MALLINCKRODT LLC	Granted	11/718989	5/10/2007	8629301	1/14/2014	PROCESS FOR THE PURIFICATION OF BENZPHETAMINE HYDROCHLORIDE
1725:H		US	MALLINCKRODT LLC	Granted	11/908136	9/10/2007	7838677	11/23/2010	PROCESSES FOR PREPARING MORPHINANS AND INTERMEDIATES THEREOF
1727:H		US	MALLINCKRODT LLC	Granted	11/722767	6/25/2007	7456318	11/25/2008	PROCESS FOR PREPARING BENZYLATED AMINES
1735:H		US	MALLINCKRODT LLC	Granted	11/719001	5/10/2007	7750187	7/6/2010	CRYSTALLIZATION METHOD FOR BENZPHETAMINE
CD0065:H	B	US	MALLINCKRODT LLC	Granted	737887	11/26/1996	5756745	5/26/1998	PREPARATION OF NALBUPINE HAVING LOW BETA-EPIMER
CD0076:H	A	US	MALLINCKRODT LLC	Granted	08/939245	9/29/1997	5912347	6/15/1999	PROCESS FOR PREPARING A MORPHINAN DERIVATIVE

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CD0080:H	C	US	MALLINCKRODT LLC	Granted	08/862010	5/22/1997	6102198	8/15/2000	Bulk Packaging System & Method for Retarding Caking of Organic & Inorganic Chemical Compounds
CD0080:H	D	US	MALLINCKRODT LLC	Granted	09/296164	4/21/1999	6308826	10/30/2001	Bulk Packaging System & Method for Retarding Caking of Organic & Inorganic Chemical Compounds
CD0080:H	F	US	MALLINCKRODT LLC	Granted	09/560043	4/27/2000	6343458	2/5/2002	Bulk Packaging System & Method for Retarding Caking of Organic & Inorganic Chemical Compounds
H-MP-00013		US	MALLINCKRODT LLC	Granted	11/916036	11/30/2007	7935821	5/3/2011	METHOD FOR SEPARATION AND PURIFICATION OF NALTREXONE BY PREPARATIVE CHROMATOGRAPHY
H-MP-00017		US	MALLINCKRODT LLC	Granted	11/917180	12/11/2007	8067597	11/29/2011	A NEW SYNTHETIC ROUTE TO 14-HYDROXYL OPIATES THROUGH 1-HALO-THEBAINE OR ANALOGS
H-MP-00021		US	MALLINCKRODT LLC	Granted	12/518434	6/10/2009	8445682	5/21/2013	PREPARATION OF 3,4-DIHYDROISOQUINOLINES FROM AN ACID AND AN AMINE
H-MP-00021	D1	US	MALLINCKRODT LLC	Granted	12/481993	6/10/2009	8461384	6/11/2013	PREPARATION OF AMIDES FROM AN ACID FOR INTERMEDIATES IN THE SYNTHESIS OF MORPHINANS
H-MP-00021	D2	US	MALLINCKRODT LLC	Granted	12/482014	6/10/2009	8232400	7/31/2012	PREPARATION OF 3,4-DIHYDROISOQUINOLINES IN THE SYNTHESIS OF MORPHINANS
H-MP-00024		US	MALLINCKRODT LLC	Published	12/159025	6/24/2008			THE USE OF ORIPAVINE AS A STARTING MATERIAL FOR BUPRENORPHINE
H-MP-00026		US	MALLINCKRODT LLC	Granted	12/518430	6/10/2009	8242277	8/14/2012	PREPARATION OF TETRAHYDROISOQUINOLINES FROM DIHYDROISOQUINOLINES
H-MP-00026	D1	US	MALLINCKRODT LLC	Granted	12/482036	6/10/2009	8227611	7/24/2012	A PROCESS FOR THE PREPARATION OF HEXAHYDROISOQUINOLINES FROM 1,2,3,4-TETRAHYDROISOQUINOLINES
H-MP-00032		US	MALLINCKRODT LLC	Granted	12/833025	7/9/2010	8623888	1/7/2014	3-OXY-HYDROMORPHONE DERIVATIVES

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H-MP-00034		US	MALLINCKRODT LLC	Published	12/529723	9/3/2009			PROCESS FOR THE PREPARATION OF QUATERNARY N-ALKYL MORPHINAN ALKALOID SALTS
H-MP-00034	D1	US	MALLINCKRODT LLC	Published	12/553144	9/3/2009			PROCESS FOR THE PREPARATION OF QUATERNARY N-ALKYL MORPHINAN ALKALOID SALTS
H-MP-00036		US	MALLINCKRODT LLC	Granted	12/469951	5/21/2009	8148528	4/3/2012	PROCESSES AND COMPOUNDS FOR THE PREPARATION OF NORMORPHINANS
H-MP-00037		US	MALLINCKRODT LLC	Granted	12/441397	3/16/2009	8115002	2/14/2012	PREPARATION OF SUBSTITUTED MORPHINAN-6-ONES AND SALTS AND INTERMEDIATES THEREOF
H-MP-00040		US	MALLINCKRODT LLC	Published	12/552457	9/2/2009			SUBSTITUTED BERBINES AND PROCESSES FOR THEIR SYNTHESIS
H-MP-00045		US	MALLINCKRODT LLC	Granted	12/532410	9/22/2009	8217175	7/10/2012	PREPARATION OF OXYMORPHONE FROM ORIPAVINE
H-MP-00050		US	MALLINCKRODT LLC	Granted	12/595519	10/12/2009	8309727	11/13/2012	NOVEL OPIATE REDUCTION UTILIZING CATALYTIC HYDROGEN TRANSFER REACTION
H-MP-00051		US	MALLINCKRODT LLC	Granted	12/586856	9/29/2009	8232398	7/31/2012	RECYCLING PROCESS FOR INCREASING THE YIELD OF OPIATE ALKALOID DERIVATIVES
H-MP-00056		US	MALLINCKRODT LLC	Granted	12/444421	4/6/2009	7985858	7/26/2011	PROCESS FOR THE PREPARATION OF 6alpha-HYDROXY-N-ALKYLATED OPIATES
H-MP-00056	D1	US	MALLINCKRODT LLC	Granted	12/630171	12/3/2009	8273888	9/25/2012	PROCESS FOR THE PREPARATION OF 6alpha-HYDROXY-N-ALKYLATED OPIATES
H-MP-00056	D2	US	MALLINCKRODT LLC	Granted	12/630192	12/3/2009	8524904	9/3/2013	PROCESS FOR THE PREPARATION OF 6alpha-HYDROXY-N-ALKYLATED OPIATES
H-MP-00058		US	MALLINCKRODT LLC	Granted	12/316821	12/17/2008	7671204	3/2/2010	N-DEMETHYLATION OF N-METHYL MORPHINANS
H-MP-00059		US	MALLINCKRODT LLC	Granted	12/372788	2/18/2009	7999105	8/16/2011	PROCESS FOR THE PREPARATION OF 3-HYDROXYMORPHINAN DERIVATIVES
H-MP-00062		US	MALLINCKRODT LLC	Granted	12/595543	10/12/2009	8399475	3/19/2013	CRYSTALLINE FORMS OF NALTREXONE HYDROCHLORIDE

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H-MP-00068		US	MALLINCKRODT LLC	Published	12/668900	1/13/2010			PREPARATION OF N-ALKYLATED OPIATES BY REDUCTIVE AMINATION
H-MP-00069		US	MALLINCKRODT LLC	Published	12/560614	9/16/2009			CRYSTALLINE FORMS OF FENTANYL ALKALOID
H-MP-00070		US	MALLINCKRODT LLC	Granted	12/668218	1/8/2010	8383649	2/26/2013	CRYSTALLINE FORMS OF NALTREXONE METHOBROMIDE
H-MP-00072		US	MALLINCKRODT LLC	Published	12/546898	8/25/2009			CRYSTALLINE FORMS OF SUFENTANIL
H-MP-00074		US	MALLINCKRODT LLC	Granted	12/586874	9/29/2009	8273887	9/25/2012	PROCESSES FOR SYNTHESIS OF OPIATE ALKALOID DERIVATIVES
H-MP-00085		US	MALLINCKRODT LLC	Granted	12/316861	12/17/2008	8017777	9/13/2011	PROCESS FOR THE PREPARATION OF BUPRENORPHINE AND DERIVATIVES OF BUPRENORPHINE
H-MP-00086		US	MALLINCKRODT LLC	Granted	12/316862	12/17/2008	8252808	8/28/2012	PROCESS AND COMPOUNDS FOR THE PRODUCTION OF (+) OPIATES
H-MP-00087		US	MALLINCKRODT LLC	Granted	12/316846	12/17/2008	8461337	6/11/2013	SINOMENINE DERIVATIVES AND PROCESSES FOR THEIR SYNTHESIS
H-MP-00087	D1	US	MALLINCKRODT LLC	Granted	13/352668	1/18/2012	8614224	12/24/2013	SINOMENINE DERIVATIVES AND PROCESSES FOR THEIR SYNTHESIS
H-MP-00088		US	MALLINCKRODT LLC	Granted	12/316974	12/17/2008	8067596	11/29/2011	PROCESSES FOR THE PRODUCTION OF (+)-"NAL" MORPHINAN COMPOUNDS
H-MP-00089		US	MALLINCKRODT LLC	Granted	12/316887	12/17/2008	8101757	1/24/2012	PROCESSES FOR THE PREPARATION OF NORMORPHINAN SALTS
H-MP-00093		US	MALLINCKRODT LLC	Granted	12/485200	6/16/2009	8168790	5/1/2012	PROCESS FOR THE PREPARATION OF 6-BETA-HYDROXY MORPHINAN COMPOUNDS
H-MP-00096		US	MALLINCKRODT LLC	Granted	12/586850	9/29/2009	8394814	3/12/2013	METHOD OF PURIFYING CRUDE NOSCAPINE
H-MP-00097		US	MALLINCKRODT LLC	Granted	12/627355	11/30/2009	8367827	2/5/2013	PROCESS FOR PREPARING HYDROCODONE USING A SUPER ACID
H-MP-00098		US	MALLINCKRODT LLC	Granted	12/558646	9/14/2009	8252928	8/28/2012	PROCESSES FOR THE SYNTHESIS OF FIVE AND SIX MEMBERED HETEROCYCLIC RINGS
H-MP-00100		US	MALLINCKRODT LLC	Granted	12/586844	9/29/2009	8269006	9/18/2012	PROCESSES FOR THE SELECTIVE AMINATION OF KETOMORPHINANS
H-MP-00101		US	MALLINCKRODT LLC	Granted	12/586843	9/29/2009	8080661	12/20/2011	PROCESSES FOR THE SYNTHESIS OF TERTIARY AMINES

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H-MP-00102		US	MALLINCKRODT LLC	Granted	12/586834	9/29/2009	8163912	4/24/2012	BERBERINE COMPOUNDS AND PROCESSES FOR THE PREPARATION OF BERBERINE COMPOUNDS
H-MP-00103		US	MALLINCKRODT LLC	Granted	12/586854	9/29/2009	8293906	10/23/2012	PROCESSES FOR THE ALKYLATION OF NORBUPRENORPHINE WITH REDUCED IMPURITY FORMATION
H-MP-00105		US	MALLINCKRODT LLC	Granted	12/563295	9/22/2009	8227483	7/24/2012	POLYMORPHS OF 6-BETA-NALTREXOL
H-MP-00107		US	MALLINCKRODT LLC	Granted	12/586841	9/29/2009	8232396	7/31/2012	PROCESSES FOR THE SYNTHESIS OF OPIATE ALKALOIDS WITH REDUCED IMPURITY FORMATION
H-MP-00108		US	MALLINCKRODT LLC	Granted	12/586842	9/29/2009	8227608	7/24/2012	PROCESSES FOR INCREASING THE YIELD OF OPIATE ALKALOID DERIVATIVES
H-MP-00110		US	MALLINCKRODT LLC	Granted	12/710383	2/23/2010	8563727	10/22/2013	(+)-MORPHINANUM N-OXIDES AND PROCESSES FOR THEIR PRODUCTION
H-MP-00111		US	MALLINCKRODT LLC	Granted	12/710379	2/23/2010	8436174	5/7/2013	(+)-MORPHINANUM QUATERNARY SALTS AND PROCESSES FOR THEIR PRODUCTION
H-MP-00112		US	MALLINCKRODT LLC	Granted	12/586855	9/29/2009	8232397	7/31/2012	PROCESSES FOR THE PRODUCTION OF BUPRENORPHINE WITH REDUCED IMPURITY FORMATION
H-MP-00113		US	MALLINCKRODT LLC	Granted	12/652894	1/6/2010	8283472	10/9/2012	SYNTHESIS OF METHYLPHENIDATE AND ANALOGS THEREOF
H-MP-00115		US	MALLINCKRODT LLC	Granted	12/757064	4/9/2010	8293907	10/23/2012	PREPARATION OF SATURATED KETONE MORPHINAN COMPOUNDS BY CATALYTIC ISOMERIZATION
H-MP-00116		US	MALLINCKRODT LLC	Granted	12/710390	2/23/2010	8563724	10/22/2013	(+)-6-HYDROXY-MORPHINAN OR (+)-6-AMINO-MORPHINAN DERIVATIVES
H-MP-00116	T1	US	MALLINCKRODT LLC	Published	14/045009	10/3/2013			(+)-6-HYDROXY-MORPHINAN OR (+)-6-AMINO-MORPHINAN DERIVATIVES
H-MP-00118		US	MALLINCKRODT LLC	Granted	12/706909	2/17/2010	8431701	4/30/2013	PROCESS FOR THE REDUCTIVE ALKYLATION OF NORMORPHINANS
H-MP-00121		US	MALLINCKRODT LLC	Granted	12/797642	6/10/2010	8519133	8/27/2013	PREPARATION OF 6-ALPHA-AMINO N-SUBSTITUTED MORPHINANS BY CATALYTIC HYDROGEN TRANSFER

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H-MP-00123		US	MALLINCKRODT LLC	Granted	12/876284	9/7/2010	8314237	11/20/2012	PREPARATION OF 10-KETO MORPHINANS BY BENZYLIC OXIDATION
H-MP-00124		US	MALLINCKRODT LLC	Granted	12/818230	6/18/2010	8492547	7/23/2013	METHOD FOR THE ENRICHMENT OF BUPRENORPHINE USING CHROMATOGRAPHIC TECHNIQUES
H-MP-00127		US	MALLINCKRODT LLC	Granted	12/797640	6/10/2010	8471023	6/25/2013	REDUCTIVE AMINATION OF 6-KETO NORMORPHONES BY CATALYTIC HYDROGEN TRANSFER
H-MP-00134		US	MALLINCKRODT LLC	Granted	12/889484	9/24/2010	8431705	4/30/2013	ONE-POT PREPARATION OF HEXAHYDROISOQUINOLINES FROM AMIDES
H-MP-00134	C1	US	MALLINCKRODT LLC	Published	13/749805	1/25/2013			ONE-POT PREPARATION OF HEXAHYDROISOQUINOLINES FROM AMIDES
H-MP-00135		US	MALLINCKRODT LLC	Granted	12/889502	9/24/2010	8415474	4/9/2013	ONE-POT PREPARATION OF HEXAHYDROISOQUINOLINES FROM DIHYDROISOQUINOLINE
H-MP-00136		US	MALLINCKRODT LLC	Published	12/757098	4/9/2010			PREPARATION OF SATURATED KETONE MORPHINAN COMPOUNDS
H-MP-00137		US	MALLINCKRODT LLC	Granted	12/885851	9/20/2010	8399671	3/19/2013	METHODS FOR PRODUCING HYDROCODONE, HYDROMORPHONE OR A DERIVATIVE THEREOF
H-MP-00138		US	MALLINCKRODT LLC	Granted	12/886621	9/21/2010	8383815	2/26/2013	HETEROGENEOUS RUTHENIUM METAL CATALYST FOR THE PRODUCTION OF HYDROCODONE, HYDROMORPHONE OR A DERIVATIVE THEREOF
H-MP-00144		US	MALLINCKRODT LLC	Published	13/233227	9/15/2011			PROCESS FOR THE PREPARATION OF SUFENTANIL BASE AND RELATED COMPOUNDS
H-MP-00145	T1	US	MALLINCKRODT LLC	Published	12/975407	12/22/2010			(+) - MORPHINANS AS ANTAGONISTS OF TOLL-LIKE RECEPTOR 9 AND THERAPEUTIC USES THEREOF
H-MP-00159		US	MALLINCKRODT LLC	Granted	13/093892	4/26/2011	8563725	10/22/2013	PREPARATION OF SATURATED KETONE MORPHINAN COMPOUNDS HAVING LOW METAL CONTENT

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H-MP-00168		US	MALLINCKRODT LLC	Published	13/196921	8/3/2011			TANDEM PROCESS FOR PREPARING N-ALKYL MORPHINANS
H-MP-00169		US	MALLINCKRODT LLC	Granted	13/196929	8/3/2011	8624030	1/7/2014	N-DEMETHYLATION OF 6-KETO MORPHINANS
H-MP-00173		US	MALLINCKRODT LLC	Published	13/491676	6/8/2012			REDUCTIVE AMINATION OF 6-KETO MORPHINANS BY CATALYTIC HYDROGEN TRANSFER
H-MP-00184		US	MALLINCKRODT LLC	Granted	13/606370	9/7/2012	8624031	1/7/2014	PRODUCTION OF ALKALOIDS WITHOUT THE ISOLATION OF INTERMEDIATES
H-MP-00187		US	MALLINCKRODT LLC	Published	13/563822	8/1/2012			STEPWISE PROCESS FOR THE PRODUCTION OF ALKALOID SALTS
H-MP-00189		US	MALLINCKRODT LLC	Published	13/762431	2/8/2013			ONE POT PROCESS FOR PRODUCING 6-HYDROXYL NAL-OPIATE
H-MP-00190		US	MALLINCKRODT LLC	Published	13/705205	12/5/2012			PREPARATION OF 7-MEMBERED LACTAM MORPHINANS FROM 6-KETO MORPHINANS USING A BECKMANN REARRANGMENT
H-MP-00207		US	MALLINCKRODT LLC	Published	13/939357	7/11/2013			Extended Release, Abuse Deterrent Pharmaceutical Compositions
H-MP-00209	P1	US	MALLINCKRODT LLC	Pending	61/905312	11/18/2013			PREPARATION OF NORMORPHINANS
H-MP-00225	P1	US	MALLINCKRODT LLC	Pending	61/901032	11/7/2013			PRODUCTION OF 6-HYDROXY MORPHINANS WITHOUT THE ISOLATION OF INTERMEDIATES
H-MP-00226	P1	US	MALLINCKRODT LLC	Pending	61/886695	10/4/2013			SYNTHESIS OF SUBSTITUTED BERBINES
H-MP-00227	P1	US	MALLINCKRODT LLC	Pending	61/898634	11/1/2013			A CONVENIENT PREPARATION OF N-ALKYL MORPHINAN-6-OLS-FROM MORPHINAN -6-ONES
H-MP-00231	P1	US	MALLINCKRODT LLC	Pending	61/771203	3/1/2013			SUSPICIOUS ORDER MONITORING PROGRAM
H-MP-00237	P1	US	MALLINCKRODT LLC	Pending	61/882039	9/25/2013			IMPROVED PROCESS FOR THE PREPARATION OF RADIOIODINATED 3-FLUOROPROPYL-NOR-BETA-CIT
H-MP-00239	P1	US	MALLINCKRODT LLC	Pending	61/792951	3/15/2013			ABUSE DETERRENT TABLETS FOR IMMEDIATE RELEASE WITH FUNCTIONAL SCORE

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CaseNumber	SubCase	Country	Owner Name	Application Status	AppNumber	Filing Date	Patent Number	Issue Date	Title
H-MP-00042		US	MALLINCKRODT LLC	Granted	12/298917	10/29/2008	8022181	9/20/2011	COMPOSITION AND METHOD FOR THE RELEASE OF PROTECTED PEPTIDES FROM A RESIN
H-MP-00075		US	MALLINCKRODT LLC	Granted	12/264948	11/5/2008	7714063	5/11/2010	SOLID SUPPORT FOR FMOC-SOLID PHASE SYNTHESIS OF PEPTIDES
H-MP-00119		US	MALLINCKRODT LLC	Published	12/773324	5/4/2010			SOLID SUPPORT FOR FMOC-SOLID PHASE SYNTHESIS OF PEPTIDE ACIDS
H-MP-00146		US	MALLINCKRODT LLC	Published	12/973962	12/21/2010			COMPOSITION AND METHODS OF PRODUCING STABILIZED SOLID DOSAGE FORMULATIONS OF MORPHINANS
H-MP-00146	A1	US	MALLINCKRODT LLC	Pending	14/092375	11/27/2013			METHODS OF PRODUCING STABILIZED SOLID DOSAGE PHARMACEUTICAL COMPOSITIONS CONTAINING MORPHINANS
H-MP-00146	T1	US	MALLINCKRODT LLC	Granted	13/166770	6/22/2011	8597681	12/3/2013	METHODS OF PRODUCING STABILIZED SOLID DOSAGE PHARMACEUTICAL COMPOSITIONS CONTAINING MORPHINANS
H-MP-00146	T2	US	MALLINCKRODT LLC	Published	13/995810	6/19/2013			COMPOSITION AND METHODS OF PRODUCING STABILIZED SOLID DOSAGE FORMULATIONS OF MORPHINANS
H-MP-00177		US	MALLINCKRODT LLC	Pending	13/473586	5/16/2012			PHARMACEUTICAL COMPOSITION COMPRISING OXYCODONE AND ACETAMINOPHEN
H-MP-00177	A1	US	MALLINCKRODT LLC	Granted	13/473563	5/16/2012	8658631	2/25/2014	COMBINATION COMPOSITION COMPRISING OXYCODONE AND ACETAMINOPHEN FOR RAPID ONSET AND EXTENDED DURATION OF ANALGESIA
H-MP-00177	A2	US	MALLINCKRODT LLC	Pending	14/109052	12/17/2013			COMBINATION COMPOSITION COMPRISING OXYCODONE AND ACETAMINOPHEN FOR RAPID ONSET AND EXTENDED DURATION OF ANALGESIA

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CaseNumber	SubCase	Country	Owner Name	Application Status	AppNumber	Filing Date	Patent Number	Issue Date	Title
H-MP-00177	P4	US	MALLINCKRODT LLC	Pending	61/794848	3/15/2013			PHARMACEUTICAL COMPOSITION COMPRISING OXYCODONE AND ACETAMINOPHEN
H-MP-00177	P5	US	MALLINCKRODT LLC	Pending	61/871690	8/29/2013			COMBINATION COMPOSITION COMPRISING OXYCODONE AND ACETAMINOPHEN FOR RAPID ONSET AND EXTENDED DURATION OF ANALGESIA
H-MP-00177	P6	US	MALLINCKRODT LLC	Pending	61/926027	1/10/2014			COMBINATION COMPOSITION COMPRISING OXYCODONE AND ACETAMINOPHEN FOR RAPID ONSET AND EXTENDED DURATION OF ANALGESIA
H-MP-00179		US	MALLINCKRODT LLC	Granted	08/271593	7/7/1994	5529787	6/25/1996	HYDROMORPHONE THERAPY
H-MP-00179	C1	US	MALLINCKRODT LLC	Granted	08/611294	3/5/1996	5702725	12/30/1997	HYDROMORPHONE THERAPY
H-MP-00179	T1	US	MALLINCKRODT LLC	Granted	08/935223	9/22/1997	5914131	6/22/1999	HYDROMORPHONE THERAPY
H-MP-00188		US	MALLINCKRODT LLC	Pending	13/473584	5/16/2012			TREATMENT OF PAIN WITH AN EXTENDED RELEASE OPIOID AND NON OPIOID COMBINATION COMPOSITION
H-MP-00188	A1	US	MALLINCKRODT LLC	Pending	13/473571	5/16/2012			GASTRIC RETENTIVE EXTENDED RELEASE PHARMACEUTICAL COMPOSITIONS
H-MP-00188	A2	US	MALLINCKRODT LLC	Pending	14/132500	12/18/2013			GASTRIC RETENTIVE EXTENDED RELEASE PHARMACEUTICAL COMPOSITIONS
H-MP-00188	P3	US	MALLINCKRODT LLC	Pending	61/798525	3/15/2013			TREATMENT OF PAIN WITH AN EXTENDED RELEASE OPIOID AND NON OPIOID COMBINATION COMPOSITION
H-MP-00188	P4	US	MALLINCKRODT LLC	Pending	61/871956	8/30/2013			GASTRIC RETENTIVE EXTENDED RELEASE PHARMACEUTICAL COMPOSITIONS
H-MP-00205		US	MALLINCKRODT LLC & NUVO RESEARCH INC.(JOINTLY OWNED)	Pending	13/657711	10/22/2012			METERED DOSE DISPENSING OF TOPICAL ANALGESICS

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CaseNumber	SubCase	Country	Owner Name	Application Status	AppNumber	Filing Date	Patent Number	Issue Date	Title
H-MP-00213		US	MALLINCKRODT LLC	Pending	13/473578	5/16/2012			TAMPER RESISTANT COMPOSITION COMPRISING HYDROCODONE AND ACETAMINOPHEN FOR RAPID ONSET AND EXTENDED DURATION OF ANALGESIA
H-MP-00213	P2	US	MALLINCKRODT LLC	Pending	61/799341	3/15/2013			TAMPER RESISTANT COMPOSITION COMPRISING HYDROCODONE AND ACETAMINOPHEN FOR RAPID ONSET AND EXTENDED DURATION OF ANALGESIA
H-MP-00213	P3	US	MALLINCKRODT LLC	Pending	61/926523	1/13/2014			TAMPER RESISTANT COMPOSITION COMPRISING HYDROCODONE AND ACETAMINOPHEN FOR RAPID ONSET AND EXTENDED DURATION OF ANALGESIA
H-MP-00213	P4	US	MALLINCKRODT LLC	Pending	61/928853	1/17/2014			TAMPER RESISTANT COMPOSITION COMPRISING HYDROCODONE AND ACETAMINOPHEN FOR RAPID ONSET AND EXTENDED DURATION OF ANALGESIA
H-MP-00232		US	MALLINCKRODT LLC	Published	12/701342	2/5/2010			INTRATHECAL BACLOFEN PHARMACEUTICAL DOSAGE FORMS WITH FEWER DEGRADATION
H-MP-00233		US	MALLINCKRODT LLC	Published	12/403190	3/12/2009			INTRATHECAL BACLOFEN PHARMACEUTICAL DOSAGE FORMS AND RELATED DELIVERY SYSTEMS
H-MP-00234		US	MALLINCKRODT LLC	Published	13/787042	3/6/2013			IMPROVED STABILITY OF HYDROMORPHONE HYDROCHLORIDE SOLUTIONS
H-MP-00234	T1	US	MALLINCKRODT LLC	Published	14/019828	9/6/2013			IMPROVED STABILITY OF HYDROMORPHONE HYDROCHLORIDE SOLUTIONS

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No.	Owner	App. No.	App. Date	Reg. No.	Reg. Date	Title
1.	LIEBEL-FLARSHEIM COMPANY LLC	09905809	7/13/2001	6648860	11/18/2003	CONTRAST DELIVERY SYRINGE WITH INTERNAL HYDROPHILIC SURFACE TREATMENT FOR THE PREVENTION OF BUBBLE ADHESION
2.	MALLINCKRODT INC.	10779285	2/13/2004	7491191	2/17/2009	KEEP VEIN OPEN METHOD AND INJECTOR WITH KEEP VEIN OPEN FUNCTION

RECORDED: 03/19/2014

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